

<223> Clone ID: LIB103-053-Q1-E1-H10

<400> 4232

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cggcaggaga ggaaagactg ttggtgtctc caagaagcga taagctgctt cacaagatt 180  
cctcatagct ttgtactac tgtgttggtc catttccaga atcttaaggg agtgttctta 240  
tttagatgat taccttggat gatgttttgc cctagataat gttttggttc tggaaccttt 300  
aatatattgt atcttgaatt ctttgttgaa ctcgaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
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<210> 4233

<211> 326

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-053-Q1-E1-H12

<400> 4233

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tttgccagaa tcaaatacga gactgttctt gagaacactg atgcatgggc tgatgacgat 180  
gattacgatg atgattatta agattatgaa actgggtgatg ctgatgatga tcattccaat 240  
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<210> 4234

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-A3

<400> 4234

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gacgttatat tcggtcccct cctctctctc ctccggggtt tcgggcgcga aatatcactg 180  
ctcatcgccc atacctctct ctctgcctct actacgtgcg tacaacgaga gatcctctga 240  
gatcatgaaa ttaggcgctg agatacgtac actgcttgct cgcacgcggt ctcagctcga 300  
gaatcgagtt attgccgtcg tatatttctc gagcttggtc cgtcgcacgc tcgcatgcc 360  
aattttacat gcctgattcg tgttctttct ggcgtagcca ctagtaagct ttcagctggg 420  
cgtgt 425

<210> 4235  
<211> 173  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-054-Q1-E1-A5  
<400> 4235

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gtaacgaaat aaagataaaa aaaagccca cgaccaggga ggttgatgtg ttccgtcggt 120  
gccgcttoga gtcctgcct ctctagagt tgcacccatc ttcacgggtt ttc 173

<210> 4236  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-054-Q1-E1-A6  
<400> 4236

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agcagcagaa tgccaaggc gcatatagtt ctacagaaga ggtgaaggag gaagtaaagt 120  
gcatcaaggc cattatagag aggctgatac agagggaagg ccatcttggtg gtcacagatg 180  
aaggaacagc ggcagcagaa ggtgctgcgg caagggcacg ggagcacaga atcctgggtg 240  
ttaacccgaa ctacgtcatt gattgattaa ccagctgagg tcacacagct aactagatcc 300  
atcatatgtg gttgaccaat agagcagaca ttcaaacgga agacatcctg ttgtgatatg 360  
ctctagaaat gatatgttgt acctgccatc cccttcccaa ggaagcaca gatctctgga 420  
attgtatctt ctttccaagg ttgaagtgtg gtaat 455

<210> 4237  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-054-Q1-E1-A7  
  
 <400> 4237

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aggtgccatg aggaggggga tgtacgaaga ggagctcatc agcgagttgt ctggaagatc 180
cacgatgaca tatggatctc aggaacggta atttggcgtc aggggatctc ggacgacggc 240
gaatcgaaga tggcggccga tggacagatc cggcggagat ggctttggta gagaagttga 300
agggcaccgc acgtctcaat cttcggcggtg gtgattccca gcttgacggc gggcatcagg 360
gacatggcgg tgcggcctct cgacgacatt ggccacggga gcggtgactc tcaggtgagc 420
acgtgagcga catgccctc 439
  
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<210> 4238  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-054-Q1-E1-A8  
  
 <400> 4238

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gcggcacttc ggccctcacc tcggcgacaa gcatcttctc caagctcacg tgtgacatct 120
agggtccttg tatcggggcg gatggcttca tcgtggcgat aattgggggtg gatgacatca 180
tcaatgggct catcaggagg gcgcacaggc ttcacacgt tcctcgatc gtagtaatac 240
gtcgtcttcg tcgtcttcac acagcgacat catcgacgcc atcctcacca tggacaacaa 300
catgggggtc ttcgcatatg cagggcctgt acagatcttt gtgtcagatc acttgattcc 360
tgacgatatg gaattccaat ctgatgatgt gccacactac aggacttctg atgcatcggt 420
gatca 425
  
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<210> 4239  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-A9

<400> 4239

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 gttatattga ttacggggct atatttatac ttttttcttg aaagtattat tgtgtctcct 180  
 gcgcggctgt ttctatgtat atgtgtaatc caaaagttag gagtcgttgg cttcagcccc 240  
 cacgcataca atgcgggggt gttcgcaaaa aaatatgcat aatcacactt gatccaacgt 300  
 cttgggtccat taaggagggtg atcgcacgtc gaactaggca accggacgat atagctgtaa 360  
 cactttcgct tagccatggg attttaccgg tggggctact atgtagcccc tgggtaccttc 420  
 gcg 423

<210> 4240  
 <211> 212  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-B1

<400> 4240

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 ccaaaggtga caattcctca attgacccaa tgaaactgct gcccctctaa ggcttcgggc 120  
 cgaagccaaa gggctccact ccaaaagggtg gtgggtcgcg tggaagaagt ggtgggtcgcg 180  
 gtggaagagg tggccgtggt ggattccgtg ga 212

<210> 4241  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-B11

<400> 4241

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acgagtcaca gatgagcatg gacgccttca gattgattag gatgatgacc tcgaagagct 120  
ctaagaactc ggttctggaa cttttggaac tgtgtatcat gggaaatgga ggggctctga 180  
tgttgcaata acatgaatca atgacagatg ttttgctggg aagccatctg agcaagagaa 240  
aatgcggaat gacttctgga atgaagcatc tagccatgct gatctgcacc accccaatgt 300  
tgtggccttt tatggcgttg ttctagatgg gcctgcggga tccattgcaa cggttataga 360  
atacatgggt aatggctcac ttatgacggc tttgctgaag aattccaaga gcctggatcc 420  
gatcatacgg ctaatta 437

<210> 4242  
<211> 233  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-054-Q1-E1-B2  
<400> 4242

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cgccgggcat cagcgcgccc ctctgttcg caacgagaat gcatcgtcgg tgctcaaatt 120  
cgccgggctg gtgggtccggc gattcatccc ccaacgggtc tgctgccggc cgcccatctc 180  
cggttccggc cggaacaccc aactcaacaa gtacgtcatc tcctcctccg gtc 233

<210> 4243  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-054-Q1-E1-B3  
<400> 4243

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aactgaaaac ttaaggtgtg gtgggtaatg gtttgctcc gaattggccg aattaatccg 120  
ttccaatttc aaccattcgt ggaattggtt aaagggtaat aagtcccaag ttcaagttaa 180  
ataataagtt ggttggtaaa aaaataaatc aactcaacca caggtcaaca aagtgagtaa 240  
ggtgaattag gcgaactaag acgaccttat tgaggacaag agcagagagc tgactcatgt 300

cgtacgtgaa ctgaaaaagg aatttaaaga actcgaattg gtgtataaaa aggatgcttc 360  
acgtgccacc agctatgcat aggccattca agatgtt 397

<210> 4244  
<211> 213  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-054-Q1-E1-B4  
  
<400> 4244

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aaaccgcctc cgtctcaagg aagtcacaat atgcaatata ccaccaacaa ggaaatagat 120  
gaacggttat gatgtctcaa gtccaagtat agtagtaa at tgttggttca aaaaataaat 180  
catctcatcc acaggtcccc aggtgagtca agt 213

<210> 4245  
<211> 401  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-054-Q1-E1-B6  
  
<400> 4245

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agccagatcg cgctggagaa gcagaagaat ctggagtgtt ggtactgccc ctctgcctc 120  
tgcaggggct gcttcaagaa caaggacgac gaggagatca ccctgtgcga cggctgcggc 180  
gaggcctacc acgtgtactg catgacgccc aagcgcacct gcgtcccaa gggccactgg 240  
tactgcccgc tgtgcagcgt gcggcgggca agggacggga tgcagaggta cgagaagtcg 300  
atcctgaaga aacaacaaca tataagcgcc aagcgtgcga gccagtcgga cgacgcttag 360  
cctagttgat gatgctattg cttggccaac atgggagtaa t 401

<210> 4246  
<211> 420  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-054-Q1-E1-B9

<400> 4246

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gcaggacgat catacccccg atgtcgccat ccacaaagcc cttgccctct ggcaccttgg 180  
ccacgaaaac cgggtatgcc acatccttct ctctgagacg ccgcttctcc aaagaaagaa 240  
cattgtcgtg cagactccgc atagcaccgg ttgcagcatt gagcatatct ggtggtagca 300  
tcgccctacc cgccacatgc accctcctcg agatatactg cggatgaagg ggcccgctct 360  
gagcacggat cgtactcggg gccggctggc tcgcaccctt cttagccttt cttttgcgtg 420

<210> 4247

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-C1

<400> 4247

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gccaaacaaa acttgcaaat gcccgcgaca tgtccgagat agtattttat aagtggccgg 180  
aaaatgttct cggattggga tgagagttgg cgtgtggtct gggtatggtg taggtagacc 240  
gcctgccaag tttcatcgca atcggagttc gtttgacgcc ccaacgatta actatagcga 300  
cattatagtc ggtctaactg cggggcgttt cggctcctcg aaacagatgc cgggccctct 360  
ctctctcttc tccccctcgc agtctcgcca cagccacact agtccatcct ccttccccct 420  
ttcgtttccg gagttgtc 438

<210> 4248

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-C2

<400> 4248

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gggtgaatta aagaaagccc aatggaattc aactaaaatt ttggataagg gcttaaagaa 120  
 agcctcaagt tgctcaatta tatcaatttg agttgggatg cctgtttctc ttcacataga 180  
 caacagccat ttgtagaatg ctcttttgct tcacttatat ttgttagagc gtcggcatat 240  
 attttttaga aagaattaa ctctcttggt tcacttacat caatttagag agatgacagg 300  
 aatttgtcat tcacatgggt agtcatataa tcctagataa acttgtagat cgctgaatat 360  
 ggtatgtttg attccttgca atagttttgc gatatgacga tggatgatatt agatcatgc 420  
 aagtgggtgg ttgtgg 436

<210> 4249  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-054-Q1-E1-C3

<400> 4249

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 taaacgtcat gtaacaaatt tgaaacatga ggtgttattt gattgtcctc cttatgagtg 180  
 gcggtcgggg acgagcgatg gtcttttctt accaatctat cccctaggag catgcgcgta 240  
 atgctttggt ttttgatggc ttgtacattt ttgcaataag tatatgagtt ctttatgact 300  
 aatgttgagt ccatggatta tacgcactct cacccttcca tcattgctag cctcttcggt 360  
 accgtgcatt gccctttctc acattgagag ttggtgcaaa cttcgccggt gcacccanac 420  
 cccgtgatat gatac 435

<210> 4250  
 <211> 96  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-C4

<400> 4250

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 caatttcctt ttggaagggc aaattgattg atggcc 96





<223> Clone ID: LIB103-054-Q1-E1-C7

<400> 4253

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gaggagccgt gtgggtatgt attgattgtg gcagaaaacc tgccttgag tacaagtact 180  
tgccgatgc taggatacag caggagagaa gaccgaggt tacacgggag agaggaagag 240  
atagaattag gaggtagtta agattacatg acgtgaatat ctctaactct aactctaaca 300  
caccgatgt acggcggcgc cgcctcttgc gctgacagt tgacgacaac ataacgcctg 360  
gagcacggca gtatgctccc ttggcttga cgcacactgt acttggtctt gttgatcaat 420  
atgttgaatg cgatgaagcc ac 442

<210> 4254

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-054-Q1-E1-C8

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taaagtataa atcatgagca ccttgggtacc aaaccaagca attggatcgt acttctaaca 180  
cgcttcagca ttttcaactt cactcaatac atgagcgtga gccatagata tagcactatg 240  
ggtggaacaa aatatggtcg taaggatcaa tangagaagg aagaaagtct cgcattaatt 300  
gggcggatca acgggttatg gagatgcaa tcaatcaata tcaatgagag gactacggat 360  
ttccatgcaa caaatgcact aagagctata agtgtatgaa agatcaaact gaaaactaag 420  
tgggtgttca tccaacttgc ttgctaattg 450

<210> 4255

<211> 444

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations  
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gaaagggagc ctcaaaaggc ttgggaaggc aaaaatcaag gaatccccgg aaataaagga 120  
aaatttggtg aaaccaatga atactgtana gaaagcagct tcaaagtggg tttctaattc 180  
aagtgangag ctgaaagtca atgcatcaat gaaagctcct aatgttgctt ataacgcaaa 240  
ggaaagggaa gctacattat attcgccgat gagagctggt gctgggggtga tcacgaagaa 300  
acaaaaggag catgttatag atatgggaaa atctgatgat tttgtggaag aaccactgcy 360  
tcttccgcag tctgttgcyg cggtactga aaaagtcact gtcagtccca gtgttcgtac 420  
ntaaaaaggg agaagtactt cact 444

<210> 4256

<211> 104

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-D2

<400> 4256

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<210> 4257

<211> 427

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-054-Q1-E1-D6

<400> 4257

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atggcttaga gacgcgcttg tccgaaatgt ggggtaagtt acgaaagtac cccaccgat 180  
ttgaggcggt tctttcgggt caggggtacc acgggcattt cgcggtgctgg gatttcacag 240

gaggtgggag ttttcgcgcg cggtgtaatt tcggaatagc aaggcgcggg ttgagatgga 300  
 gggagttgtc ggagcacaac gagacanaga tatatcttaa atatttcggg ctaacaaggc 360  
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 ggcataa 427

<210> 4258  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-D7  
 <400> 4258

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 ataagcttga tatggtctta tggaatacat ctcaaataat gaggtgacaa cctgccactc 180  
 acagaaaaag attgtgttga taagaataag gagacgagaa acttattcac cggaaggata 240  
 aaacaagaac ttggatcatt tataaccacc ataaatagca aaatccttag ggaaagcttt 300  
 aggtgaaata taaccaaga taactccaac gaagagggtg atggatttaa aattttctcat 360  
 tcttaacaac atgtgaatca tgaaacatga gctcaaatta tcaataatga cataatacca 420  
 cctccaatga tacggtagaa agaatt 445

<210> 4259  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-D8  
 <400> 4259

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 agtggaaga aaaaggagaa gaaaaagaag aaaaaaagat gcagatgagg cacaatacgt 120  
 agagatagta gtttacattg gcttgtcatg ttatttggtt gcagttatgt gggagcttga 180  
 actacctgtt ttatttgctt tgtaccctt gcaaccgtct atggtttggt aggtacgcct 240  
 gatgtactat ctttacgtta ctgccattca accgaaatgc tatggtaatt acagagattt 300

ccctttaaat ttggacaatc agccatgtat tgcagtatct gttatctgta tttgcagtga 360  
 attttgttct catctcaata aatcaagaca catgagctca aattatcaat aa 412

<210> 4260  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-D9  
 <400> 4260

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 aaaaaacgga taagaaaaag aagaaaaaga gatgcatagg aggcacaata ggtacagata 120  
 gtagtttaca ttggcttgtc atgttatttg gttgcagtta tgtgggagct tgaactacct 180  
 gttttatttg ctttgtaccc cttgcaaccg tctatggttt ggtaagtagg cctgatgtac 240  
 tatctttatg ttactgccat tcaaccgaaa tgctatggta attagagaga gttcccttta 300  
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 tctcatct 368

<210> 4261  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-E12  
 <400> 4261

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 cgtcagtctg tggatctcaa ctccattgct ttcctttttg atggctcgat gctccgtggt 180  
 gagcagaccc ctgatgagct tgcgatggag gaaggcgaca atatggatgc catgcttcac 240  
 cagaccggtt ggtgctttcc tggcccttag aatgagcttg ctgcagcctg actgttctat 300  
 gtcgtatgct acgttttagca ctagactaca ctgtgagaag tgccagaagt tgtcaggcta 360  
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<210> 4262

<211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-E2

<400> 4262

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 ggtccgattt gcaaaactcg taacaaagaa gaaccaaaaa taagttttca ttacactgat 180  
 gtttaagata gtttcccaca ttaatcataa aatctgcagg attgataaga cagttattac 240  
 aactgcacct acagttgcat tatgcgcaac aacggaaccg tcacagcaat gttacccctc 300  
 ctcgctcgaa gctgcatttc actcagacct caaacatgac gccaaacctg gtaacaagag 360  
 gaatggatat gatggcagca cccagcgcaa cgccaaatat acggtgtgag atggagaacg 420  
 tggcgctc 428

<210> 4263  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-E3

<400> 4263

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 ttgcctcttg ggctaattgat gaacattaca agggcagaac ggctctctga ggttaaggcg 120  
 ttcttgtgct tggtgagctt gtgtgtgagg tggctctctt caagctccga tcagtcctct 180  
 cactcccttt ttctctctcc cttttcactg tgggtggttag tcctatttat agaggccctg 240  
 gtctctcttc gaaatatoga gcgggaaggg agccaacaat ggcggggctaa tttgaagggg 300  
 ggtagctagt acaagctatc ctgacaaaag tagtattcgc gtgcacaaag ttctggtggt 360  
 gatgttgttt tgggctccac gatgacctcc gtcttgcaat cctcggctct ggtcttgttg 420  
 caccgaaatg gcaacctttg 440

<210> 4264  
 <211> 445  
 <212> DNA



<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB103-054-Q1-E1-F2

<400>       4266

gggccactga caccaaaaac aggtcattca attggcaaaa aaaaaaaatc caccaacaag   60  
ggataaggaa atgaccgacc ccaaataagg ggcaatccac aaagcccaac aacccccaaaa 120  
aacctccgaa ttaggtgggt cgggcaaccg gaattcacc cccatccaaa gccataaaac 180  
acaaccaacc aacgcaaaaac aacaaggcct cctccctcct ttccctcctc cgaaatcgca 240  
cgactcaacc gctgccatgg acgctggaaa aaacctcaga tctgttctga cctctctgta 300  
gttcttttgc tcacatttct tccttccaaa gtccttctcc cagtcggcaa acatccacta 360  
cagaaaaact ggaaaagtgg atgagttctc attntncaca gatctgtcaa gaaggacaaa 420  
acggagaaaa gaaanaaagg gagagaagaa cctgc                               455

<210>       4267

<211>       433

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-054-Q1-E1-F4

<400>       4267

gtccacgggc catcatgaat attcattggt gtctctcaaa ttcattgttg cagatgtgct   60  
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tttgcggtt caccatgttac tgtctgtact tgtgagaatg atgtttgacg aaagtaacaa 180  
cttgaacata acatagecca tatgaccaag ctgttccaat tcgggagctc actctgtatt 240  
caattacttt ctattactaa acatatactt gtatctccaa ccaatccgag ctgggcttgg 300  
tgggcttaac ctatgcatct gcattggatt tataaaaagta gtaaattgtac atttagagaa 360  
cttgacagac taaactcata taacttcaca catggataac gcaactattat aagtactcaa 420  
aagatgacca ttc   433

<210>       4268

<211>       444

<212>       DNA

<213>       Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-F8

<400> 4268

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caccctccta tctcttgccc tcctcgaggg tcttctgacg tgaactccaa gtctctagga 120  
tgatattctc ccaaaaaatc acgatgccga aggtttcatt ccgtttggac tccgtttgat 180  
attcctcttc ttcgaaatac tgaacaggc aataaaacaa caatatgggc tgggcctccg 240  
gttaataggt tagtcccaa agtaataata aagtgtataa taaagcccg aatcattcaa 300  
aacagataat aaaatagcat gaatgcttca taaattatag atacgttaga gacatatcag 360  
caactccttc ccctattccc tggagatgca acgcaggga acaccgttcg accgtttccg 420  
gtagagctct ccatcttgga tgca 444

<210> 4269

<211> 262

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-054-Q1-E1-G1

<400> 4269

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gcgtcatcct gtagttgata gtaaagaggc agccagtgc tcccttatta ttaaaaaaga 120  
gggattcgca ngggcgctac ttatttacta agtggacttg ggtcgcaacc tgcattggcg 180  
cacaccccat gatcacgng tggaatatgg tcgccccacc tgttctcatg cctctgactc 240  
gctcgccaca tgtcncgcat gc 262

<210> 4270

<211> 356

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-054-Q1-E1-G2

<400> 4270

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ttaaaacaag aatttgagaa aaaatgaatc ctcaatttta aaaaccggcc ccaaaaaaaaa 120  
 aaggaaaacc caaaaaaagg aaggccggaa tatttatata ttaattaaga aaaaaaacag 180  
 gcaagttagt tagttggtgc cacagaatgc aatgcatgct cncatcatca tcatcatcat 240  
 catcatcata atgtgatcag agctgagacc tgatcgatgg caaatattag tacttagatt 300  
 agtactcctg ettacacaag tccagtaatg agatgcctcg gttgcttcgc ttctgc 356

<210> 4271  
 <211> 113  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-G3

<400> 4271

acatcatcat cgcccctgcc atctaccacc accgctatcc gccacgctcc gaatccgtat 60  
 tcatatacca ccaccgattc atataccacc accgaatcat atccatatca tat 113

<210> 4272  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-054-Q1-E1-G4

<400> 4272

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 ggaaaaggag gcaaaacctt ttgatgataa aagaccagc aagaaaaaga aaagaaagaa 120  
 aaaaaaaaa acggaggatt tcaaccttga taaggatgac tacatgttgc tcaaggataa 180  
 taacattacc ggcactcctc gtccgaagcc tcctgaaaac aagtttaagc ggttgaagaa 240  
 ggcaagacgg gaatctgaaa tggatgggcy ttctggcttc tctgatcatg acggagcaag 300  
 aaaaagccgg actgctgagg agacagttcg tagctccttg tttggtaatg aagaaccgtt 360  
 tgaggaagat tttgtcgagg aagatcagca ngtagatgaa gatgaagttg gtgaagatga 420  
 tatggatgat gaaa 434

<210> 4273

<211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-054-Q1-E1-G5  
  
 <400> 4273

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 agaagccgtt acatttatga tcttttctat aaaaggaagg agatatcaaa ggagctgtat 120  
 gagttctgcc tggaccaggg ttatgcagac cgtaatctga ttgcaaagtg gaaaaagccg 180  
 ggttacgagc gcctctgctg cctccgctgc atccagacc gagaccacaa ctttgcgacg 240  
 acgtgcgtgt gccgggtccc caagcatctg agggaggagc aggtgatcga atgcgtccac 300  
 tgtggctgca agggatgtgc cggcggcgat taactgacta gttatgtgta ttcatcatgt 360  
 gtcgccgaat ccatggtggc tctaagccaa gactctaga tgtttcttaa gcgtgttctc 420  
 tggtaaagaa cagatcgtcc tgtaatgt 448

<210> 4274  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-054-Q1-E1-G6  
  
 <400> 4274

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 tgtcgtggaa cccagcgag aagtgggtgg tggccagcgt ggcggaggac aacgtgctgc 120  
 agatctggga gatggccgag agcatataca gcgacgacaa cagcaacaac gccaacagcg 180  
 cctcgtgcct gtccacataa gaagacgccg ccaaccaact tcttcctga tgtgtggacg 240  
 atggccgatg gggacatggc tcgttcgtag tctttgggtg gacgagtcgc gtgcggttta 300  
 cttgtagtgc ctcgtgcggt ttcgtcgctt aattagcagc tgctgctatc gtttggcgcc 360  
 tagatcctgt agacatggat ggatggagaa gtgactctgg aatatttgta cgtcctt 417

<210> 4275  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-G8

<400> 4275

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ttcgccgacg cggcaacgga ggaaggcggc gagtccaaac tctccgcgct cctctacgac 120  
gtgtcgcagc aggtccagga cagcctccag agcatgctga agatgacggg cgagatcgag 180  
cagtgcagtg acgagatcga ggtggagatc gagcaggcca aggagggcgt ggctgacaag 240  
tacaggggtgc tcgaggagga gaaggaaagg ttccagaagg tggccctcgc ggcgctcaac 300  
atcctgagcg gtggcatctg aagcctgcac caccttaata ccaacaaaga caatcctgat 360  
aactgccccg ctctgtagat caccgttcat gtgcaagcct agcaatgaac cgccagttgt 420  
actcctccat atg 433

<210> 4276

<211> 131

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-H10

<400> 4276

cgggtacatc gaaatctcta ccactagata gttcacgcta aatccgatca gcgaacctat 60  
tatggatatca ttgtacttgt gactggcctt ctacggagca tccactccgg tttagatata 120  
tacaggatac c 131

<210> 4277

<211> 357

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-054-Q1-E1-H12

<400> 4277

tcagtatcaa tcactacatg acaccacaca acagatatgc tgctgtcagc agtcctctct 60  
aaatagacac tgcaattatc gtataagtac atcattgctg ctgtcagcag tgctctctaa 120  
atagacactg caattatcat gtacatcatt gctgtgcaa tgaaccatta agaattattt 180  
aaaatctagc ctaccatctg cgttgtcgtc aacatagggt tgaggcggag ttacaaaatc 240

tgtatgagaa accgagggat tgtccgagtc agcgacatct ttgttatctt cagagctgtc 300  
agaagcatct gagatggcgt cacctgattc tgaatgtgtt ctgtccacat atgcttc 357

<210> 4278  
<211> 318  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-054-Q1-E1-H2  
  
<400> 4278

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acattggctc cggcgggatg cagaggagg atgtcacgct ccggacatac gcgccggtgg 120  
ttgttacttc tggcggagtc tagactaccc ctacagatga ctactagtct tttctgtgca 180  
ctttgtctcc actcgtgcgc aactgtaagc aacttcccat tcggtcacac atcttgaaac 240  
tactctaagc tgatcaagct taactttgga gttctatccg aatgggctct cggattatac 300  
ggaattcctt attgatat 318

<210> 4279  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-054-Q1-E1-H3  
  
<400> 4279

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ttccaaaaac caactgaact gttttccggt ggggtcataa ggagcctatc aatctcaact 120  
agaattatcc caagtttcac ttcacatcgt gatgttggtt tacctttttt cttgtcattg 180  
tcctgctata acggatagcg ctccctgttg gcgccgctgc cggcgggggtg cccttggtgtt 240  
ggagggtgta tgctcccagc gccgggggtgc ccctgcttgt acctagatgg ttactctttc 300  
cgtccaccat tgtcaccggc taacattgtg ataatatcag tctgggtaat gttagaaaaa 360  
aaaaaaaaa aaaaaaaaaa aaaagcggcc gctc 394

<210> 4280  
<211> 389  
<212> DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB103-054-Q1-E1-H4

<400>       4280

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aacctatggg aaggattaat tatgttctta ttgttgcaaa taggaattat gtgcctatat   120  
atttcattgt tcttgatata tattgcaatc ctacacgtcc tattattctt ggtagatctt   180  
tccttagaac gattgggtga attattgaca tgaaagaagg aaatattaga ttccaatttc   240  
ctttaaggaa aggtatggaa cacttcccta gaaataaaat taaattacct tatgaatcta   300  
ttatgagagc cacttatgga ttgcatacca aagatgacaa tacctagatc tattcntggt   360  
tttatgccta gctaggggcg ttaaacgat   389

<210>       4281

<211>       408

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-054-Q1-E1-H5

<400>       4281

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ggaacctcac cgataagtag gtggaggcca acgtgacgga cgacaacatg ctgcatctct   120  
gggagatggc cgtgagcata tacagcgacg ataacagcaa caacgccaac agcgctcgt   180  
gcctgtccac ataacaatac gccgccaagc aacttcttca ctgatgtgtg gactatggac   240  
gatggggaca tggtcgttc gtactctttg ggtggacgag tcgctgctcg tttacttgta   300  
gtgcctcctg cggtttcttc gcttaattag cagctgctgc tatcgtatgg cgctatatc   360  
ctgtagacat ggtttgatgc gtaagtgact ctggaatatt tgtacgtc                   408

<210>       4282

<211>       427

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-054-Q1-E1-H6

<400>       4282

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 cctgctactg atgagcagat gtggctcagt gagccacgg ggaaagagta agtgccactt 120  
 tataataatt gcattagttt gcttgtcaca tgctcattct ggttggttaat tattgtgcgt 180  
 gtcagatgct aatagttcat tcttttgcag caactggata tattctgaag ggggccgtat 240  
 tcccaacggc ctcatcattg tcttgctgat gtttcaactgg cgggggttgt actgtccgga 300  
 tccattcaag caccgatgc atcaggtctt ggacacgagc tgggagcact gcgaagcagg 360  
 gctccatgct tgacatggga cgcagccaa ggccgtgatg accactctca gggtgagttc 420  
 gtttcat 427

<210> 4283  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-H7  
 <400> 4283

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 catgaatgat ctatgtataa cattccaaat tgaaaatttg ggatgttata tatgattgtg 120  
 ttttttatgt tttaattagt gtttttgcca agtaaagcct ttaggatctt cttgggtgat 180  
 tgttgtttga tcttgctgaa aaaaatagaa agtatgcgct cacgagaata aattttgttt 240  
 ttttaccaga gagcgataaa ctaccaattc caactgaagt ggatcaatat acaaattatt 300  
 taagtcctcc taaattttta gaaatttttg agttacacaa gtattccaaa cctgcagatt 360  
 gctataaact gttctgtttt tgacaaaatc tgtttttcct gtgttggttg cctaattt 418

<210> 4284  
 <211> 124  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-054-Q1-E1-H8  
 <400> 4284

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 tggtcggact gggctgatgc atggggatgg actgcgccgg caacggccac catgccagat 120

tggtt

124

<210> 4285  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-A12  
  
<400> 4285

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agcaagagaa caaaattctg ataacaattt tttaaaaaaa aatctacaac tagcaatact 120  
gctacaaatc tggaccagtt tagacctcgg accacaagtt acggctaagt gctacagtta 180  
tcttcggaac cttgtctggt caaggaagtg gcggttgga gccttataga agcatcaccg 240  
cagatggccg tcaagacatc aaactctcct cacgttgtct ccatggataa ccaccgcgcc 300  
ttcagtcatc aggggtgcaa gagcaccgcg gagttcgtgc atatgaattt ccattgagct 360  
ctgcttctc agttctcca gcaactcaat catgcgcac gaggggcctc caagctgcat 420  
tttccccg 428

<210> 4286  
<211> 149  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-A2  
  
<400> 4286

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tsgtgggcac acatcacatc ttgcgaaggc ttggaacagg atgctcaata atcatccaaa 120  
cgacagagaa ccagcagtga caactttgt 149

<210> 4287  
<211> 363  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-A4  
  
<400> 4287

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tatatgcgtc ttttacttgt ttacatcatc atattatccc tttggagtgc gatatatggt 120  
cagttgcaa tttttcatat cctaagtcgc ttaaggtttc atgataaaag gcatgagaga 180  
gcacatctgt aataggtgca tgcccaatat actgttttaa attcactata ttgtttgtgt 240  
tactttgtgt ccacagccta ttaacaatg gggctcttac ttaaaagcta ctgtgatgtc 300  
tacctatctc ttgtctgata caatcctgct ttaacaagt gccgagattt tgcacgtca 360  
cca 363

<210> 4288  
<211> 357  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-055-Q1-E1-A5  
<400> 4288

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ctgggcagat tcgatgaaca catagaacta taaactggat ccaactgcaa tcagtgtcca 120  
gaacacgcaa agccgtacag attcacagtg caggggaaac acggagttac gatgacacaa 180  
acggagataa cgggtggcagc agggggactc aaacgttcac cagccacagt tagtacgggt 240  
acttcatggg gaacacgaag gacacacaac atggattgcc tttctgatag gcaatgcagg 300  
gtttgtctc ctcttcagt tcccgcgagg tagcacctcg tcgccgcagg ctttact 357

<210> 4289  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-055-Q1-E1-A6  
<400> 4289

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aacaaataga actacaaact ggatccaact gcaatcagtg tccagaacac gcaaagccgt 120  
acagattcac acagcagggg aagcacggag tttcgatgac acaaatggag ataaggggtg 180  
cagcagggg actcaaactg tcagcagcta cagctagtac ggtttcttca tggggaaaac 240



gaaggaaaca agacctgcat tgcctttcta atatgcatg cacggtttgg tttcctcctt 300  
 caattccgc ggggtactat accgttaccg caggctttac tcacttggcc atcatgacct 360  
 tgacgaactc ctctacttg attcgg 386

<210> 4290  
 <211> 371  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-A7  
 <400> 4290

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 atcctcgacg atatccgcca tctctctcgc attcgagaat ggcgcgcgct cgccattgcc 180  
 gtcccccaat cgggatttta tctcgctatt gctacggtac ggccgcgcgt acccattagg 240  
 tcgacgtcgc cgcgatcggg ctggcgacca cgtggtggtc gctggaccag actagccgcc 300  
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 tctcgctgga c 371

<210> 4291  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-A8  
 <400> 4291

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 tttttttttt ttttcagaaa agccggaaga caatagagtt tttgaacatt accccgaaca 120  
 atacacataa aaggatcgag tctccgttac acgaaatcct ggaggacgaa tgcagctatg 180  
 cacgcaggcc catggatctt ttattttatg agctaaaatg gcttcgagcc gacccaaggt 240  
 taccatggag actctacttg ttctgcagca aggacaccgc tgccttatca gtgaaccagg 300  
 tgaattctcc atcttgtagc acagccatct caacaggcag caggtctgac gaggtttgct 360  
 tgtctgaaag cgccttctgc accgctgccg cctttccagc tccagtcacc accatcgcaa 420

cg

422

<210> 4292  
<211> 121  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-B11  
  
<400> 4292

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atctataact agcaatactg ctacaaatct ggagcagttt agaggtcgga ccacatgtta 120  
c 121

<210> 4293  
<211> 154  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-B4  
  
<400> 4293

cacttgcaga ttactactac cgcctgcagg ttagcatat cggttgcaca gaaatgacgc 60  
cagtagatcc aaacgggaaa tcgctgctac acccgcgcgg attcacaacg tcaccagcgg 120  
acgccacacg ctgaggaact ccagctattg ggca 154

<210> 4294  
<211> 352  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-055-Q1-E1-B5  
  
<400> 4294

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aacaccgtgt cgcaccagca agcggagcgc ccatacaagg tgaataacgt atggctcgcca 120  
gatgagggtt tcagagccta agaccaggac cttttctgag cctagaaaca tccagaggta 180  
catgctcgaa atgtcatgag cagcatgtgt gttttgttac attgtaaaat caagcctctg 240  
ggagcttgaa gatggctcgg aaaggtttcc agaactccac ctcttcagca tctccagagc 300

agccttcggt tgaatccatag gtacatgtg accaacatcg tgaaccttca ag

352

<210> 4295

<211> 217

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-B9

<400> 4295

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gcgaggctat agcgagcgag agagcgatag cgcgggtgcgc gggcgtggct cgctcagcgc 120  
gcgaatgcgc tcgtcgacg gatgcagggg agagaagggtt cgcttggtcg gttgatcgat 180  
aaatcgaagg aaatccgat gagcgatgaa tgcgcgcg 217

<210> 4296

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-C12

<400> 4296

ccctcgagta tttatctttg tcttttttaa acaaacatct attgtgatct gagattttaa 60  
acaggcatca tagatgcttg gggtaagtac agactgcagg ctaaaccatcc caatccaaca 120  
acggtcgagt gccgatgaag cgaagaaact acaaactaaa ctgcctcact ccagggcagg 180  
gacgacactt gcaaggaaac tactcagaga agacggcact aatctactgc atctagaaag 240  
tccttcgaga aagcccgtt agggcgacaa cgacgaagat tttttccct gactgcaaac 300  
acttgacag agtttcatcc gtcatacatc actcgtcacc ctctcgtcc tcgtcgttca 360  
cctcggactt ggacttgcg gaatcaccag acgccgtggg gtctcctcg 409

<210> 4297

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-C3

<400> 4297

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 tgcattccaat ggatgaacaa cgttgcttgc tgtttacatc atcaagggtt gccaaaggcct 120  
 cgcttggttat ccagatgtca caactaccgc gagtcaagac gctcttataa cgcaaacacc 180  
 ttcactacat atgaggcctt ctgcacctga ttataaccac tatatatata ttatcatgtg 240  
 ctgcacaggt tgcattctcc attcctgctc cactccttga ccgcccagca aagcaatgga 300  
 ccaaaacatt gcctccagag cttatagctt catctatgaa accaaagcat tcatcagaat 360  
 gctttaacag atcagtgtct ggg 383

<210> 4298  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-C5  
 <400> 4298

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 attgcagtga atattattca acatgtaaac tgcattccaa tggatgaaca acgttgcttg 120  
 ctgtttacat cataaagttt gccaaaggcct cgcttggttat ccagatgtca taatacgcgg 180  
 tcaagacgct cttacaacgc atacgccttc actacatatg aggccttctg cacctattat 240  
 aacactagta taattatcag tgctgcacag gttgcattct ccattcctgc tccactcctt 300  
 gaccgcccag caaagcaatg gacaaaaaca ttgcctccag agcttatagc ttcatctatg 360  
 aaaccaaagc attcatcaga atgctttaac agatcagtgt ctgggatatc aagtact 417

<210> 4299  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-C8  
 <400> 4299

ccccacgagt attttttttt gtcttttggg aaggacagt acctctctct ctatattgga 60  
 agtatagaac aagggtgcaa acccattgtc gtcactccaa accaccaag cacaacaggt 120  
 ggctcgaaat tacacgcgcc attaatgcgc agcttgacc agcgggtttc aggtcaaggc 180

caaaactgagg aaaagatggc gtccggtccc cgacagcgac gcaccccgcc gccagaaaac 240  
 aaatgcagta ctgcccagac tcgaaggagg tttgaacggg gcggttttat ttcgacttcc 300  
 tgcttggtg cttgctttac tgaacgaagc acgaacccgg gccgaccggc ggcctccgag 360  
 cgtagtagtt cgtgacagga gccgcggcga cccacgggtg gttcagc 407

<210> 4300

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-D1

<400> 4300

tcgagtattt tattttgtct ttgtcaatgt gcaaatatct gcgtgcgag aacagcaaata 60  
 ggcagctaaa gctgaaagaa aacaagtgt cacaagtaca catcatagga gaggtcacgg 120  
 aggggttatg cttactagga agacggctag catacgcaat tgaggacaaa ggattactgg 180  
 aaagctttcc cgaattggcg catcacttta gagcatcgcc gagggccgca agcattccca 240  
 ggctctgctg caactcagcc aacctcactt tcaaggcctg gacgctccgt cgggtgtacat 300  
 ccgtgtaggc atcgttgacc aaacccgaaa gtctttcagc acataacacc atcgagctt 360  
 ctgtgagttc aagactcaca ggttgctggg atccaaaaag 400

<210> 4301

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-D12

<400> 4301

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 tactgtcca tttaagtttc aacctcagac agatctaaat gagatacaat ttgagtaacc 120  
 aacatctaaa tgcttgatag gttggcggat aaagcaaata ggggcaagca attacgcctt 180  
 ctgggtgtag acataggtga ggccgcactt gccgcagtag tggcggtcga agtggttggc 240  
 catgaagacg cccgcgccgc actctgtgtt ggggcactcc ttgcggagga gggtcacctt 300  
 gccagtggcg tcgtccacct tatagaactg cagcacggag agcttcacct tcttgtgctt 360

gtgcttgatc ttcttgggct tgggtgtacgt cttcttctta cgc

403

<210> 4302

<211> 323

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-D4

<400> 4302

gtgcagcaca gtggacacat attacacaac attatatggt gcactacaat ggctggaatt 60

tggaaatacg taccaactac tgaactgaca tggacacgat atcacgtac actatgaagg 120

gtggaataac atagttcttc atgtcccaca agtaacagag cgctaattta ttattacaac 180

caccatgcct ggtcaaacta cattaaggac tgccactgtc cctgcctgt gcatacacac 240

agggagcgag tgaacggggg cctccaccgc aaccatggta gtgacaccga cacctactca 300

catctacatg agcttgggtc acc 323

<210> 4303

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-D5

<400> 4303

acaactagtc tcgagtatct tttttttttt ttttttagtgc catcaccata tattcgatat 60

ataaaacgtt accacaatct gctttctgta cttaatagag cgacattagc acatagcaga 120

tctacaaagc ggtaaaggac tccaacactt gtgcaagctc aactgcagat atttcttgaa 180

gtttcaacct actaccaaag aattaatgga actatgcctc gcggtatgta catcgctgca 240

gatagaaacc ataaaaactg ggtttcaacg tcagaactca tttccttctc ttcccacttc 300

ctatatttgc tcacttgaaa aagaacttcc atatcgccct gtcacacacc tcagtcaaga 360

agtggccacc aaggacacct tcctcttcc 389

<210> 4304

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-D9

<400> 4304

tttggtgca taaacataca gctggttcgt ctgaacattt acatacaacc caaaagggtca 60  
catcgcttcc cggaagaga aacaatataa acaagagcag gaaaacccaa aaggtcggtt 120  
cgttcttttg atgatccctt ctaagagaaa gtagggaaaa gaagaggaag aaaccacgaa 180  
taaagatgat acaagctcag aagacgtttt cttcttcaca gcacaccaac atcactgcaa 240  
ggaagtgtct aagaggtaaa cactggacac tcagttaccg tcctcttctg gccagtaggt 300  
gctgttagag atgaacagag gtcagatgtc ttcagaacgc tcaacctctt caccgaagaa 360  
acaaacatcc cccagaggga catcgccaaa cagcaa 396

<210> 4305

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-E11

<400> 4305

gatcggccaa cagtgtttca cattgctacc actacagcta aaatctcgat aatgatacag 60  
ttgatccatc ttacaacacc agaagaaaac aatcctgagg atacacaagg caaggatgta 120  
caaacgtaaa cagcagtaca gcacacattg atagaccttc gaatcgaacg acaaatecta 180  
gtgcttgctt gacatgcagc gccagaaaaa tagagaagat agagaaataa ttctgattat 240  
tccaagttga agcaactcct gcaacatttg gtatccgaca agcaccact catcacatag 300  
gctaaactag ttcgctacaa taagctcatc ttcaggattg gcattttgag gtagcatcgt 360  
caattcatcg tcagctgcac tgaaatgata tttctctcca acaactcca aaaacctggt 420  
aaacttcaaa ca 432

<210> 4306

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-E12

<400> 4306

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 tgctactcat ggaggacaaa aacagtgatg cacagttgta atttgagcaa cagcatcacc 120  
 atatgtgagt acaagacatt aaccacaaat ggagaatcca tggtagcatc ttcacaagtt 180  
 cagaagagca gaagctgcag tataacaggc tacaaggata catatcattt atcactttgc 240  
 tgctccttca aacaagtgct ggatgtgggc tacaacatcc tctgggggtg atttgatgta 300  
 caaatcacgc ccagtttcag gagaagactt taacttggca attaaagagg cgtaaactgg 360  
 catcactgtc tctccaccg ctg 383

<210> 4307  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E2  
 <400> 4307

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 aataacaagg tgcattgtga ggaaccaggt aacatgaaaa ccacctgctg cttccaattt 120  
 gtttgtgcta tcaacagcca aaaatcacga ttagcagttg gcattttgat gatcatagga 180  
 aaagctaaaa agcattctaa cccgatacaa caattggcat ctacatatgc taagcagcat 240  
 aacaatttca ctggactaac atccccacaa actaacacca agcttgtggc aaaagctagt 300  
 tacttgttac tgatccccga acaggcacta accccaaga aaataaggat ttatgccacc 360  
 aaaatgttat cgccacgtgt tggaa 385

<210> 4308  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E3  
 <400> 4308

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 tttggcacat cgcaataaga atgtgcatgt tgaagaagca actaaaacga caaccagctg 120  
 ctgcttccaa tttgtttgtg ctatcaacag ccaagaatca agattagcag ttggcaattt 180



gattagcata ggaaaagcta aaaagcattc taaccctata catcaattgg catccaacta 240  
 tgctaagcag cagaacaatt tctactggcct atcaccctca caaactaaca ccaagcttgt 300  
 ggcaaaagct agttactttg tgctgatgcc cgagcaggca ataagcccca acaaaatagg 360  
 gatgtacgcc accaaaatgt tatcgccact tgttggagag cttggctcca aacggattgc 420  
 tccc 424

<210> 4309  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E4  
 <400> 4309

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 acaaactaaa tattttctctc atatgtgtcc tcacaggatc gcaagagcaa cagaaacact 120  
 gggaatcctt tttacatgca tcagacccaa aaacaaagtc tgaaagtctt aatgccatca 180  
 caagattttt ctgcttaacc acctagtggg acttgggact taacatggac cataaaagag 240  
 gccatccaca acgaagtctt ttaccaaaga gccatccctg gctccatgga ccacaaaagc 300  
 ttggagattt tcgggaagcc acgactcaaa agcttggaga tctccagcat cccaaccttg 360  
 tccctccac caaacaagct ttgga 385

<210> 4310  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E6  
 <400> 4310

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 accacagaac atcatcagc atggcacata agccacgcca tgacattcag tattcgacac 120  
 agtaaggaca tcatcagtaa ctaacggttt cacattatta gcaacaaggc aactgcaatc 180  
 aactggatt tacattgtac aggaagcaca gaaacctaaa tcaggatcta acgagtcaca 240  
 agcaagcata caggttccta gtatatgcca gcagtagtct ctaactgtca atgccaggtc 300

cggtttgccc ctgtgtctgc agctgacctg gcagttgggg ctgcagctgc gcttgtgagc 360  
 cccccctgtg attgtagaga tgtacctgag gttgggggttg gg 402

<210> 4311  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E7  
 <400> 4311

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 ccacgatcta attcgtcatg aaaaggctcc aggcacgcat actcgatata gagagataaa 120  
 cactgctgga gctggactca tcgttccggc tttgtggtgg cctagtcttg tgctgtgaca 180  
 ttctgcccct cctttgtttg tgatatgcca taattttgac gtgagtacag tttcactggc 240  
 atgttgattc tggaactacg actggacatg tgggaaaaac tagtatactt tggtttggga 300  
 ccgcaacagg cattaagccc catccgtata cggatgttcg ctacctaaat gttctcgcca 360  
 cttgttgc 368

<210> 4312  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-E8  
 <400> 4312

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 gcacatcttc actgcatcat gtaactagaa aggtgcaagt caccatgaat agtaagtact 120  
 aaatactgat aagatggtga taactgataa taggataatg ctaaaacgaa gggttaaagt 180  
 ggaatggaac tgggtgtacat aaagtttttg ataaccagtt caggtgccaa acagaagtag 240  
 tattccaagg ttgaagcagc aactgaaaga cggcactaca caacttttagc tgagaagagg 300  
 ccaccatcga gcaaatgcgt acacatagga tcagagcaag tccattcatc ctgagctact 360  
 caagatgctt tgcaagtga ttcgcttat gtcgatgggc tccgagaacc ttgaaattgg 420  
 tcaaatgttg cccctgacgg aacatctccc a 451

<210> 4313  
 <211> 281  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-E9

<400> 4313

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 aaaagcatgg atttactgaa atgggaatag tgaacaagt gaccttcacg cccaaccag 120  
 acaaacgctt tccagttcat ccgacgggat ggatcaggct gggaaatgcc caatacagtg 180  
 tcaccatgga ggggtttcatc tgagcggatg acgggagagc tatcccagca caggtcgacg 240  
 gattgcccac ccaaccgtag tatatgcacg acggggggat g 281

<210> 4314  
 <211> 295  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F1

<400> 4314

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 ctcaggccta ccatctacat actccagcag atccaatcca ccggagatta gtatttacag 180  
 ctttgtgagc gatttagaca ttctctagt gaaccgcaag gagtgcaact gatggaaacc 240  
 tgacaccaga aatcaaagaa ctctcagttg agttagaaag gccgaccaga agtcc 295

<210> 4315  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F10

<400> 4315

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ctaggcccat aacatacact ccatgcaacg ccatcaagtg gccaaataca ccagttatca 180  
taattaacaa ccagcatgat ctgacttcaa acttcatgcc gtacgaagggt gtggagaaac 240  
caatatgaca ccatcacctc ggacaaaaag aaaggggata gtgcgtttcg tggcgcgac 300  
aattttcttca tatgtttcat catctatctc aacagttgtc acgacctctc aacatctcca 360  
agtatcatgt ttaaagtgtg atcatacgca tggagcttgc cgcgc 405

<210> 4316  
<211> 425  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F12

<400> 4316

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agatagacat tatgccagca aaagcactga tctaattcac cggcagctgg ccagccgtaa 120  
agaattagga gataagttac tccacacagt ctggttcaga agatcgccgc caggcataac 180  
atcttctcat gcctaccatc tacatactcc agaaaatcca atctactgga gattactatt 240  
tacagctttg tgagcgattt agacattcct ctagtgaaac gcaaggaatg caactgatgg 300  
aaagctgaca ccagaaatca aagaactctc agttgagtta gaaaggccgc gcacaagtcc 360  
agaaagagga gctgtggccc actgactctt tgcaaatcga ggaggtatct ctccgtccct 420  
ggttt 425

<210> 4317  
<211> 311  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F2

<400> 4317

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atccgctgct gacaatactt tcaaatttta gtacacgaga tatgacacaa atcatgtggg 120  
atgcacacga tgggtagccc atgtaaataa aatgacgatt ggatttaact gcattgcagt 180  
tcataagatc ctgttcaatg gctcccggtg tgatgaactt ctcaatggca tggaccgctt 240

cgaaggcgac cgggatggag aaagttatgg ggccaaccaa taggtcgaga gatttggcga 300  
cgacctcatc t 311

<210> 4318  
<211> 288  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F3

<400> 4318

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tcattccatg cacaggtagc ctctgtagtc gtcgtcggtc gtaatgggtca cttcacgtat 180  
taattggcgc catatcggtc gtaagggcgg aagccgtggg cgagcgcggc gcgccaggac 240  
ttgtctatcc cgggtgaacct ggcgacgac tcgtgcgcgt cccagcgt 288

<210> 4319  
<211> 403  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F4

<400> 4319

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gaagataggc agtagtgttt tctgttcttt ttttcgatgt cccagtttac agactgaagc 120  
catacatatg gcacaacgac tgggcccacac tattacagtc aacgaaccca ctctaggccg 180  
gacacettgc tattgggctt aagcttcctt tttaatcttg gctgtagcag cacaccatct 240  
tcgcttccag tctctggcgc aggttcactt gtcttggcat ccttgtgtgt gctaacagag 300  
tccgataatg tgatcttgat tccaacaag acaacaatag aaatgcttaa ttagaaacgg 360  
acaatacatt atcataacca gcgtccaaaa cttggatgca aca 403

<210> 4320  
<211> 390  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F5

<400> 4320

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cataaagttt gccaaaggcct cgcttggtat ccagatgtca taatacgcgg tcaagacgct 180  
cttacaacgc atacgccttc actacatatg aggccttctg cacctattat aacactagta 240  
taattatcag tgctgcacag gttgcattct ccattcctgc tccactcctt gaccgcccag 300  
caaagcaatg gaccaaaca ttgcctccag agcttagagc ttcatctatg aaaccagagc 360  
attcatcaaa atgctttaac agatcactgt 390

<210> 4321

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F6

<400> 4321

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gaaatacaga cagttgactt tcaccgctcc ctcaatattg tcctaataat attaaccaac 120  
agcctaagaa atacagtaca aaagagtcac gcctatcata catcgaatgt tctcaatata 180  
gacgaagctg ctggccagcc tacaacaatt tcagagttta acgtgactac tgggaagggc 240  
aaaatcatct gcgcgatgaa acccagctgc gcccaccagc actggctgta gtcttcgggg 300  
gaggaaacat gcttatgtcg gttggggcag cgggttggtc ttcaaccaca aggaccgcc 360  
tagcatggct ctacatgaa cagccatgta tgaagcattc aacttgtcaa catca 415

<210> 4322

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-F8

<400> 4322

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gacatacaca accattatat tggtgaaaaa tacatgcagc tcctgtcctc aagactcggg 120  
cagaggcgca gagcacatcc ttctaattgg gtatacatat gctttccctg tctatcgtgg 180  
ccatggactt tgcaatacca tagataccat acgaaaacac gaaacgggag aagcaaggaa 240  
acgttacaaa tcgtacatgt ggatacaaca ctaaaacaag cgttccacac agctagcacg 300  
gcactgatca ctgtacctga tcccgtggag tgaagcgggtg aacgggtccga cccacaggac 360  
aactgaactg aactgaactg cacaggcggc ggcggcaaga cagaggaact ggtgaa 416

<210> 4323  
<211> 377  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-G1

<400> 4323

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tgacaaaaat gcagggagag aatgagaaga gtacaggcgt tcataaaaag gaatgagcga 120  
ctcagctcat acaaattgtca atgcaacgtc aagcacattt agcagggtcac tgtaccactt 180  
caaggtcctt gaagtactca tgctcaagtg cttgcctcgc tgtgattctt ttgcctggct 240  
cgtatcgaag catttttagag agaagggtcca acccagcagg gtcaagattt gggactactg 300  
ttgccaggtc ctgagcttgc cacctgggga aagctgtctt gaagtcaggc aaacaactga 360  
ctccctggcc aactctg 377

<210> 4324  
<211> 426  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-G10

<400> 4324

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aacactttta ggtttcagaa gcaacattgt cttgtctcac gaaacaatac aatacttgaa 120  
tcaaacacct acttcttaaa ttatttacat gccaaaggctc agaatgctta tcactttgga 180  
acacataaaa cgaacgactc tctcaccgtt cgttcgttca ttcattcatt cattcattca 240

ttcacaggcc agcttgggtgt cgaagctcgt cagacatatg gcgaaggcct ggaaggccga 300  
cagcgggtac cggtagtcca tggatgaacat gtccctcccg accttgccga actgcaggat 360  
caccgggtca tggtagcagc acgacgacgg cggcggcggc ggcggggggc cggaggcctg 420  
cggctg 426

<210> 4325  
<211> 357  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-055-Q1-E1-G11  
<400> 4325

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caatgtttca ccatagtacg aggcaacaac acatccgttc tgaaacacat gtcctttaac 120  
aatctaaagc acagtagaca gataaacaac gacaataact ctaggtggcc ttgtcagcct 180  
tggaggctgt ggcagcagct tgaccctga gccttcagct cctcctagcg gcaatgagac 240  
caaccttccg gccaggggga gcgtctcggc ggacagtaca ggcgtcaccg atgtgttggg 300  
ggttacctcc tccgtgggga tgctccacag ggttcatggc cacaccacgc accttgg 357

<210> 4326  
<211> 399  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-055-Q1-E1-G2  
<400> 4326

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aattagtacg cagacagcaa tcagcaggta tggaacatgt ttcacatgat gtttagattt 120  
gcaggatatc ctcttatttg gcggttcacg gttcaccgcc gagttgattt ccgatatcgc 180  
ccttagctca ccggacactc agttgttgca agtggcaact acgaaggagg agcagcagag 240  
gcagatgcct cagccggagc cgcctcgtca tccttgtgct tcaccatgcc cgagtcgacc 300  
agaatcggga cttccgccgc gagccacggc gcgaggccga ggcacagcgc gtgcgccagg 360  
ccgaacctcg ggcagttctt ggcccacagc ggcttgaag 399



<210> 4327  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-055-Q1-E1-G3  
  
 <400> 4327

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 ccagattcga aatatccagc tgaatgacaa aaatgcaggg agagaatgag aagagtacag 120  
 gcgttcataa aaaggaatga gcgactcagc tcatacaaat gtcaatgcaa cgtcaagcac 180  
 atttagcagg tcaactgtacc acttcaaggt ccttgaagta ctcattgtca agtgcttgcc 240  
 tcgctgtgat tcttttgctt ggctcgtatc gaagcatttt agagagaagg tccaaccag 300  
 cagggtcaag atttgggact actggttgcca ggtcctgagc ttgccacctg gggaaagctg 360  
 tcttgaagtc aggcaaacaa ctgactcctg gccaac 396

<210> 4328  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-055-Q1-E1-G6  
  
 <400> 4328

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 cagacatgtc acgagcatgc agcttcaact gcaaggcttt ttgtgacccc tgtacatgga 120  
 ttccaaaat aattcgacga cactggcacg ctgcagctgc tcaactccgat gcaagcctcc 180  
 tgaacaattg agagagcctg agtgctgctg cattcgccat ggctgtagct tccacatgtg 240  
 ccactcggtg tcccaaagct tgcaaacttg acgctgctga tgacctggcc ttcttttggg 300  
 cattccaggc gaagtgcagg tccatatctc tgcacgggct gttgagaact ccaactatca 360  
 atttgggctg gatgtgcctc tgatacttgt gcgc 394

<210> 4329  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-G7

<400> 4329

ccccacgagt attttttttt gtcttttttt ttttttattt tttttttttt tagattggat 60  
gtatacgtac atttacatcg caaaaaaaaa gtatgtacaa tttcgaggga cgtggcaaaa 120  
ttcatcaatc actcggccaa aaattggttt gtgcaaacat ctctgatgat ggatactagt 180  
ctgaaagaat ctgttctaac tcaggatccc cggccaatac atcgtcaacc atttcagcgt 240  
caacaacctc tttgtcagca gggacatctt cgtcatcatc aggttcgccc gcctcttcat 300  
ccgtatgatt gggaacagct ggctcgccaa tgcctttgcc ttggtcagca acactattca 360  
atacttgatc atcttgagat ttggctctgg ctactgcttt gccatcagtc ctttcacaaa 420  
tgc 423

<210> 4330

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-G8

<400> 4330

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cagacatgtc acgagcatgc agcttcaact gcaaggcttt ttgtgacccc tgtacatgga 120  
tttccaaaat aattcgacga cactggcacg ctgcagctgc tcaactccgat gcaagcctcc 180  
tgaacaattg agagagcctg agtgctgctg cattcgccat ggctgtagct tccacatgtg 240  
ccactcggtg tcccaaagct tgcaaacttg acgctgctga tgacctggcc ttcttttggg 300  
cattccaggc gaagtgcagg tccatatctc tgcacgggct gttgagaact ccaactatca 360  
atttgggctg gatgtgcctc tgatacttgt gcgcacaaaa ttcttggtcg gcctcatcac 420  
aaaggatatc ttgcttg 437

<210> 4331

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-G9

<400> 4331

ccctcgagta tttatttttg ttttttaaag tgaagacca atgcagtcac caatattcaa 60  
gtaaaagaag gcgctctagt ctgagagaga catattaaag taaaataaca ggtactctag 120  
tctgagagag taagacaggc aggcaggcca taacaaagat tctcagcttc ttcaatagaa 180  
gaaacctaga accttgcttc ctacgctctt cggcggggcc tctcgtggg ccatgatgcc 240  
tgccgaagtt gtgaggacga tgtatccgaa ctgcctggac gggagcagcc ttgcagtcca 300  
tccctcaatg tctttcacgc cgatatcaaa gcgagggctg atgacgccgc acttggtcag 360  
cctcccgttg agttcgacca cgatcttgcc cgatcggtag tcatcaa 407

<210> 4332

<211> 244

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-H1

<400> 4332

tgccaggaaa ttggatttgt gaaaacgtct cagatgctgg atcatattca gaaggactct 60  
gttctaaatc cggatccccg gccactacat catcaaccat ttcagcatca acaacctctt 120  
tgtcatcagg gacatcttct tcatcaacag gtgcgccgc ctcttcatcc atatgattgg 180  
aaacagctgg ctgcgcaatg cttttgcctt ggtcaccaac actattcaat acttgatgat 240  
cttg 244

<210> 4333

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-H10

<400> 4333

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cggctgatca cacgcgatca actatcccaa gtttttacag gcacagaact accaccgaca 120  
ctcatgctgg agtaccgac gaatctagag ctactgacaa tattacgatt ggatcaaaat 180  
ccatgaaaga ggggaatcta taggcggaat tgaggggggg atctcgccag cgacaaggca 240

ggcagactac ttcttggcct tcctggccac gcccttctctg gccggggcgg cagcagcagc 300  
 agccttcttc ggggttgcca cttcttagg agccgcgcgt gcctttccct tcttggcagg 360  
 agcagccgcc ttcttgggtg gcctggccgg ggaa 394

<210> 4334  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-H5  
 <400> 4334

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 caagacgtcc gagacatcca cataatcatc tacgatatat caacatgcat aaacgaatcg 120  
 tagctaaact aagccttcac atgcagccca ctggggggtt accgctaata cacacctaca 180  
 actcatcgta ctcatggaac ccatgaaaat catccaacag gacatcatca tctcctgac 240  
 agtaattgca ttatggagac cacgtggatg tgccaccgca aggttacgtt tttggctcgt 300  
 tgtcatggca tggaaatggc actgatgctc gcgtgacgat gc 342

<210> 4335  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-055-Q1-E1-H7  
 <400> 4335

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 tgtagataga cattatgcca gcaaaagcac tgatctaatt caccggcagc tggccagccg 120  
 taaagaatta ggagataagt tactccacac agtctgggtc agaagatcgc cgccaggcat 180  
 aacatcttct catgcctacc atctacatac tccagaaaat ccaatctact ggagattact 240  
 atttacagct ttgtgagcga tttagacatt cctctagtga aacgcaagga atgcaactga 300  
 tggaaagctg acaccagaaa tcaaagaact ctcatgttag ttagaaaggc cgcgcacaa 360  
 tccagaaaga ggagctgtgg cccactgact ctttgcaa at cgagg 405

<210> 4336  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-H8

<400> 4336

caccagctag aaaatgtgtt caaataggag tggcagaaaa ataacacggt ttaccagatt 60  
 atactgtcac aaactgttac cgaacactta aaacaaagac tagatgttcc ccaaaactga 120  
 tgacaaagca cagctcctca gtacttgata ggggcaagaa tctccaactg agaccccaac 180  
 ttctcctcgg ctgccttctc ggccttgaca cgcagcttgg ccaattgctt ctctcctcgc 240  
 taggcaacct tggccttctc ctctcctctc tectcaagtt ccctgatggg gtcagtggtag 300  
 ttccaccga cctccttaga gagctcgccg aggaggcagt acttgtgtcc aggctgtagc 360  
 ctcagaacct 370

<210> 4337  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-055-Q1-E1-H9

<400> 4337

gttctgtctt ttttttttct ttttcttttg caatgcaa ataatcagta atgaatatac 60  
 gacaacaatg tatctgtttc cgcagacccc tccagcgaaa atcgaccac tgatatctgc 120  
 aaaatcccag ttccagcttt ccctcgtaca atatgtgaaa aagaaaacaa aggtaaaagt 180  
 gggcaagcca aaaacaacca cacccaagca gcccactgt atagaaaaag gactattacc 240  
 aaactggtta tcggccctga caaaaagtgt caggtgatat caaccaggac cagccctcgc 300  
 acatcaagac cgccctaagc cactcccaca tgtcttgctt gcttggggct atagaattta 360  
 ctggagcgca cagtaaaaa acagctgatg gaccacaact gaactccaag ca 412

<210> 4338  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-056-Q1-E1-A2

<400> 4338

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taatttggtta tctttgtaat tctcttcgaa ctatcgattt gatttggtta actagattgg 120  
tttttcttga aatggagaag tgcttagctt tggattcaat cttgcggtgt cctttcccag 180  
tgatagtang ggcagcaagg cacatattgt attgtcgcca tcgaggataa aaagatgggg 240  
tttacatata ttgcttgagt ttattcctct acatcaagtc atcttactta atgcgttact 300  
ctgttcttga tgaacttaat actctagatg caagcaagag tcggtcgatg tgtggagtaa 360  
tagtagtaga ttcagaatcg ttttggacta ct 392

<210> 4339

<211> 376

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-A4

<400> 4339

cgggtccacg cgggggcttt acctgacgcg gtaggcggcg gggcagttcc gcctagtcgg 60  
ttcgacagtg acgcgagaag acgagggagt aggctgctgc aaacgtaggg ctgtgtgatt 120  
tgacagtggg ttactgctgg acaggtgggg cctgttatt tgacttgcca ttatcatttt 180  
aactgtggtg ctacgaccgg cgtgagtcct cggattcttg accacctcca tacaggtgcc 240  
tctcccaatg ctccaccatg tagtacaggc tggctcttgc atgagagcca acttctccac 300  
tttttccttg cctctctttc ctctgcatat gcaaaaatgc catgtaaagc gcaactattgg 360  
taacactttt acttgc 376

<210> 4340

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-B1

<400> 4340

cggggacagc gaaaagtaga atgggatgga agtggagcct gcggcgttcg catctgggtg 60

aggatgaaat gaagatgcaa aggagaaggg gccgacgagg aggacgagga cgaggatgag 120  
gacgacgaag aagacgactc cgacgacgaa gaagacgagg attcggagga tgaaggggac 180  
gaggacgagg acgaagactc cgacgaggag ggctacgacg acgacgacga agacgaagac 240  
gaggactccg atgaagacca tgaccacgag gaggacgagg acgacgaaga cgacgactag 300  
gacgacgacg agtataatgg gatggaagtg gagcctgcgg cgttcgcacg tgggtgagga 360  
ttaaatgaag atg 373

<210> 4341  
<211> 125  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-B11

<400> 4341

tctccctaac tcgagccctt ctccacctcc agccaccgcc gcgaccaggc atacgtgtcg 60  
gctcgtcagc atcacctcca ctatcacctt acgcttcacg taaatccatc agccaaccca 120  
cgatt 125

<210> 4342  
<211> 341  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-B2

<400> 4342

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acgatggtcg cggcggcctc tgtgagtcac ggtcggcaac gggagtcagt tcattgtcca 120  
tgacggtggt acttctacgc ttggcgctcg cttccgggaa gcagatccga gaccgtggaa 180  
gacgatgccg gggaagaggc tccgtgtacg acgacgacgg tggaccggct ccagtgcggc 240  
gtacgaagtc gtcgatgagg cagatgcgct gcggtggacg agtgcgccga tgtaaagggg 300  
aggagcatga aggctgcagt gccgtggaga agtccaattt g 341

<210> 4343  
<211> 336  
<212> DNA





tgccaaagat accccgagga acaagtgata catccagcga tccaaggaac cctgaacgtg 300  
atgaggtcct gcgtgaaggc tgtgactgtg aagcgcgtgg tcctcacatc atccacggcg 360  
gcgatctcca gccg 374

<210> 4346  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-056-Q1-E1-B9  
<400> 4346

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ctcgggtgcg tcagcagcac tggcagccaa atccacgtag gcgttcgcag aactccatag 120  
ccggtccaga tgcgcatact tcggatcccc gaacttcgtc cgcaacaaga agggccttccc 180  
agacacgata tctgcaactt gattcagctc ctccctttatc gctctaattt tggagcgggc 240  
ttacttggca gccacccggg ccttctccag gtccgtcacc ttcgcccgat tttcctcttc 300  
aagaagccgt taacggtcag gagcatcttt taactccacg gccatcttgg caactttttc 360  
cttgctctcg caatgtgagg cctgttcggc ccttaactct tcagccgcct gtaaaacggg 420  
cgc 423

<210> 4347  
<211> 415  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-056-Q1-E1-C1  
<400> 4347

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caccattggg cccggttggg ggcttgaacc gggaccacag gctgcctttt agtcccgggt 120  
catgccacga accgggacca atgaggtgcc tatatatacc cctcgcccg c gagcagagca 180  
ctccagtgt atgtttttct ctggctcggc aggggagggc tttgtggtgc tctagctcac 240  
ctcctatgca catgaggtgt tcggtgaaat gcccagacca cactagttaa gctttctcct 300  
ctcggagctc gacctcaaag ctccattttc ctcgagattt gtctaggttt agcggcccg 360

cacgtcgcat tcccgctcttc accgccgtcg atcgcccgcg ccgatctcgt cgccg 415

<210> 4348  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-C11  
 <400> 4348

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 tttgagagcg atccgtcaga gttaaccttc tctttttaca cctgcttagt taaaaacaga 120  
 ctttcattaa tattagttgc acaaacgaga gtacatcaca eggcttaaac tcgatcatta 180  
 caaaagtaag ccatcagcaa caccctagct ggcctacac cattacatac ttggctgcta 240  
 acctatgata caaatgtcat aatacacctt agcaccttga ttcagatttg ctatcttttc 300  
 tgcggctgct atttcttgct ccgatttagg gatctattga ggaacagtgt gcaactagga 360  
 tttgtttctt cgatttgggg atggattatt atagactgag ccgccaccaa ttgaagagtt 420  
 ataatgaaa 429

<210> 4349  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-C3  
 <400> 4349

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 tcaggacaac cagtcacaga tgagcatgga cgccttcaga ttataaagaa tgatgacctc 120  
 gaagagctcc aagaactcgg ttctggaact tttggacctg tatatcatgg gaaatggagg 180  
 ggctctgatg ttgcaataaa aagaatcaat gacagatgtt ttgctgggaa gccatctgag 240  
 caagaaaaaa tgcggaatga cttctggaat gaagcatcta accttgctga tctgcaccac 300  
 cccaatgttg tggcctttta tggcgttggt ctagatgggc ctgggggatc cattgcaacg 360  
 gttacagaat acatgggttaa tggctcactt aggacggctt tgctgaagaa ttccaagagc 420  
 ctgga 425

<210> 4350  
 <211> 269  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-C5

<400> 4350

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 aatttcgggc tgtctacat cacaggctga tgggcatca tattacgttt acgaggatga 180  
 agtcctactt tgatgcaggc aaccttcttc atgcctcctg taaccagaat ggcttctgca 240  
 ttaacgcagc ttaacttgct aatctacaa 269

<210> 4351  
 <211> 353  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-D11

<400> 4351

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 ctcatcaga gtgggacctg gccagagtgt catctcatgt agtgtaatct tgtagctgcg 120  
 cgcaaatcag actgggaatt caccagagg tgcggtgatt ggcgcgcgcc cctgaagaat 180  
 tttgtagcgt tcgatgctaa ttatttgaa taattggttc gggcagcctt aaccgggtaa 240  
 agttgctgtc tacaaggctg aaaagtttag aaaattgtgt caaacctcag gaacaacccc 300  
 tttgtaattg ctgaagaagt gggcagttca tctggtattg caccaaaaaa gaa 353

<210> 4352  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-D2

<400> 4352

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ttccaccacc ggcaccttct gtatccgtga gatcccatct tcgagccttc gtcggcgctc 120  
 cgtcggaggg ggaatcgacc acggacggct tctacatcaa caccatagcc cctccgatga 180  
 gttgtgagta gtttaccaca gacctacggg tccatagtta ttagctagat ggcttcttat 240  
 ctcttttttg atctcaatac aatgttctcc cctctcttta tggagatcta ttcgatgtaa 300  
 actatttttg cgggtgtgtt gtcgagatcc gatgaattgt gggtttatga ttaagcttat 360  
 ctatgaga 368

<210> 4353  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-D4

<400> 4353

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 aatgtaaata aaaatatgat atgcatatga tgtcctatgt ataacatcca aattgaaaat 180  
 tgggatgtta caaacactca cattctgata atgaagaaga taatgatgag gttcatgaaa 240  
 atactcaaac aaatagtaat gaaccagaca atgatgttga gatagaaccg ccagttgatc 300  
 ttgataacct acaacctaaa aataaaagat atgataatag agacttcacg gctagaaaac 360  
 acgggggaaa caagcgacca gccgagaaga aaaaagcggc cgct 404

<210> 4354  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-D5

<400> 4354

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 cagaggtttg tgcacttttc ccacaagac tctaatacat ccatgggtcaa agaaacgaga 180  
 cacagtgttt ctgagacaat aactctttac tctgggtgga cagctacacc tactttcccc 240

tacatctgct agccacctc taatagaggt ctcaaatgt actcaactat gctagagccc 300  
 ataatagctt gtggatgctc acggaagttt ctagcatgaa caatcttatg atccgtttga 360  
 gcctggggtt cggtccatat gagaatcaca cagtattcca ggatttccac aggcacagggc 420  
 atcaactgggt tcccccaagtg ccccaa 446

<210> 4355  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-D6  
 <400> 4355

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 tacctgcaga aggagttgga ccttctgtca cttgatcttg atctctctgc ttgtcgaaac 120  
 caggaggctt ggtgacattt aatgggggta gcctctgcat aaacacctcc tcacaacgtc 180  
 tgatttttga acatcctcca ctgctactga catgagatct tgcttctgcc caatggtagc 240  
 tacctcagtt tggagtactg tcatgtcaga tcgaagggat tcagtctcct tctgattgtc 300  
 aaggacctcg gatctcatag ctaggagatc ctgaatatca gattcttcca tgggtgccctt 360  
 gctgcgaccc atcgtgaagg aaactgggca gagatttgct tggttgttac ctaacacaga 420  
 tgccgctgga aagtga 436

<210> 4356  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-D7  
 <400> 4356

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 ggaagacgag gggcaggaag aagggcagca aggccaagaa gagcgtggag acgtacaaga 120  
 tctacatctt caaggtgctg aagcaggtgc acccagacgt gggcatctcc tccaaggcca 180  
 tgtccatcat gaactccttc atcaacgaca tcttcagaaa gctcgccggg gagtcggcca 240  
 agctcgcccg ctacaacaag aagcccacca tcacgtcccg ggagatccag acctctgtgc 300

gcctcgctct ccccgaggag ctgcgaagc acgccgtctc cgagggcacc aaggctctca 360  
ccaagttcac ctctcctaa acaacttagg cttgatcctc gtcgcctcat gcg 413

<210> 4357  
<211> 273  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-056-Q1-E1-D9  
  
<400> 4357

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ggaagacgag gggcaggaag aagggcagca aggccaaaga gggcgtggag acgtacaaga 120  
tctacatctt caaggtgctc aagcaggtgc acccgacat cggtatctcc tccaaggcca 180  
tgtccatcat gaactccttc atcaacgaca tcttcgagaa gctcgccggg gagtccgcca 240  
agctcgcccg ctacatcagg aatcccacca tca 273

<210> 4358  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-056-Q1-E1-E2  
  
<400> 4358

cgggtcacgg gaatggttgc aatacaccac cacatggggc aacgttcaac acgtataacg 60  
caaaaagtcg ggactccgaa ttacgaattc tgggagcatc ctagataatt atgtcatcaa 120  
aatggcgtaa caaaaggact gtcttggacg cacagactag atactcagta agctcctata 180  
tgcaatccat tcccatcatg agataaatgc tccaggactt cactacgatg ggagagacac 240  
ggaaatcaag tccccagat tctacagata cgtcgtgtca actcaggagg gttcgacatt 300  
ggccacacg ggtgtgcact aatatataag cgtacatgtc atcactttta atgccatgca 360  
ttattgcaaa atcttctgac atgaatgaat gcgatgcgcc tgtctcaaag a 411

<210> 4359  
<211> 379  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB103-056-Q1-E1-E3

<400> 4359

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aactaggcaa ggaatgtttt tgacacatth gatgaagata tgatccanaa catttatgag 120  
aatttttttg gaattttttg aaaaacagaa atataggttg cctcaaaacc tagggcaaaa 180  
actgccacat ggacatgaca cataggcana actgatgaga tggcgcttag tcatcacaac 240  
ccaccacaat cctacaagct atgaccatct atattgggtca ttaacaacta gaaataaggc 300  
agcggactaa gactgtttgc tttgtgacca tttcgtgtaa ggaaattacg gcctttctga 360  
ccaaaatggt cccaatggt 379

<210> 4360  
<211> 339  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-E4

<400> 4360

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actcctctc gtctccgcc gccgcgtgc tccgcgattc gctaggtcat tgtagagcat 120  
ctccgttcg aaggtcacct aggagcgct gctacgcttc caccaccatg ggagacgaga 180  
cctccacttc tgctcagge tcggcccagg aacctgcage accggccctg cagggagctg 240  
ggagtgtcaa gcagcagatc tccaacttgg tggctctgtc actccgtgcg acagtgcctg 300  
aagtggatgt agaaccgata gttgaagttt gcacgggaa 339

<210> 4361  
<211> 408  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-E5

<400> 4361

gtccacgggg acacgcaaga accctagcag atcgctcgag ccctccgccg ccgccgcgcc 60  
ttcagctctc tccttccttc accgattcaa gatgaagttc atcgctgcct atctgcttgc 120

ttacctctct ggcaacgcca gcccctctgc agaggacctg acatccattc ttgagtcagt 180  
 tggttgtgaa atcgacaatg agaagatgga actcatgctg tcccaagtga agggcaagga 240  
 catcactgag ctcttggtg ctggtaggga gaagtttgct gcggtaccat ctggtggtgg 300  
 tgggtgtggct gtttcagccg ctgctcctgc tgctggtggt gctgctgccc ctgcagctga 360  
 gtcaaagaaa gaagagaagg tcgtggagaa ggaagacagt gatgatga 408

<210> 4362

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-E7 .

<400> 4362

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 agccgtaaaa gcttctttat caataatata accttcagga atatcaggca tgttttcatc 120  
 atcaatttca tcaacatgat gagtttcaat aatttctttc tctctagccc tagcaatttg 180  
 ttcatacaaaa aattcactaa tgggcacagt agtatcaagc atagaagtag tttcatcata 240  
 agtatcatgc atagcagaag tggcatcatc aataacatgc gacatatcag aacgaatagc 300  
 tgaagcaggt ttaggtgtcg caagcttact cataacagga gtgaatcaag tgcagagcta 360  
 gatggcagtt ccttacctcc cctcgtagtt gagggaaaaa tttttt 406

<210> 4363

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-E9

<400> 4363

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 aagacccccg gcaggatcct tgccggggaa gccgcacac cgtggaaaga cccttgccgg 120  
 gccacccggc aagaccctcg ccaagcgcac cggcagggcc actgccaggc ccgagccaac 180  
 caagtctttg ctgccgttcg catgcagctg ccacccaga cagctgggca ggcacctgcg 240  
 tggcaacatg caaccttcat ggaggctcca ccaactgcgc acctcagctg cctgcctgcc 300



aacagggcac cgcatgcagc gctggccagg gcgtgtgtcg aaacgagaac gggcggagac 360  
ggacgggaca gggctcgac acgtcccca ggccgcgaga 400

<210> 4364  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-056-Q1-E1-F1  
  
<400> 4364

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tatgggtggc ggagtacacg agtgggttcc gatgtcagga taaccacgt ccatagctct 120  
catgtgaatg tggcaaggcc acaaaacaag ttttccatcg ccagatatcc aacagatcaa 180  
ctgggtgttat ggatgcttct taaagatatt ttttgtcat ttcanacatc aaacaccaac 240  
tattcacaat ggagacagga aacgtgtagc ttctcatgtc aactaagtga gcoctgccaat 300  
tgtggcaatg gaaggagggtg gcatgtcgcc tcattcatga ggctgttagt ttcataacag 360  
acattttcca gttgcatatc ttttgtaaag tggtcagact ggtttttt 408

<210> 4365  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-056-Q1-E1-F12  
  
<400> 4365

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acaaaacagc atggtaattt tcttaaattg tgaaattagt cctaaatatg ataggcatcc 120  
aagatttgta aaaactttct tataagtgcg ttgaatacta agaaaagttt gatgcttgat 180  
gattgttttg agatatggag gtagtaaatt aaagttgtgc tagttgagta attgtgaatt 240  
cgagaaatac ttgtgttgaa gtttgcaagt cccgtagcat gcacgtatgg taaacgttgt 300  
gtaacaaatt tgaaacatga ggtgttcttt gattgtcctc cttatgagtg gcggtcgggg 360  
acgagcgatg gtcttttctt accaatctat ccccttagga gcatgcgcgt agtgcttagt 420

ttttgacgac

430

<210> 4366  
<211> 186  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-056-Q1-E1-F2  
  
<400> 4366

gggtccacgc ggatgaatga atccattgtg agaagagccc ttgtgatcat gcaccatagg 60  
gacgaagtgg agtacaagag ggagcgccat gtgattgtcc gcaaggcttg agctgacctg 120  
aaccgatgga gctaccatgg aaacctctgg ccaactgatg tgtgtgtaaa agtattgctg 180  
acactg 186

<210> 4367  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-056-Q1-E1-F3  
  
<400> 4367

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catgtcagcg ggcttccatg caaaaatgtc ncagttctca cggaggaact ggatgagcgc 120  
ttcttcttat tttaggtcga gtgttgtgga gatgcggggc ggagctgcat cggggtcggt 180  
cgggtgaatg tgaacaggtt tcgtctcgcc ggacgactgg aatgcagact ctgtggcggg 240  
tttcttcgat cgcagcaagt cactcggatc tgcgttttgc ttgtattctt cgaactcgac 300  
cgctgtcacc tgggaatcgg caatcttggg gcccttctga tagcactctt ctgccttttt 360  
ccgatcaccg gggacagtga ttactccttt ggggccgg 398

<210> 4368  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-056-Q1-E1-F4

<400> 4368

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gcaggcctag acttaatcag cagcctcccc gatgatatgt tgagagtcac catctccctc 120  
ctcccagtca aatatggggc gcgaaccgtc ctttcccggc ggtggtgccc cctatggaac 180  
tccagccctc tcgacctcat cgacaccac gagctctgcc atggctatcg caaaatcttg 240  
gatgcgttct ccaagatcct cgacagtcac cttggtgata acccacaagt ataggggatc 300  
gcaaccgttt tcgagggtag agtattcaac ccanatttat tgattcgaca caaggggaga 360  
caaagaatat tctcaagtat tagcagttga g 391

<210> 4369

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-F6

<400> 4369

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acagcgcttg taattgtagg ccctttccgc atacttcaca gcttggtgtc ttatgaggtg 120  
ctgcagggca gcaggctggc ttgtgccgcc tcggtcatta ttatcatttg taacttggtta 180  
gagtgcacat taatctcagg aggacataga cataatactt atgctgctgt tgttgtaacc 240  
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa tttataaaaa aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa 360  
aaaaaaaaaa agggggcccc ccaaagg 387

<210> 4370

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-F8

<400> 4370

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tgttgctctt ccgcttccca ggaggaggat gtttccattt cttcctgtag cctgtactat 120

actctaaatc aagctgtgta tgtatactta gcctctggca aatgttgaag tgctggatga 180  
 aaaaagaaat gaagctctgt agtccatgca tgagaacaag ttatgatatt aaatgtaact 240  
 gctagcatta ttttattgct gttatgaaga gtgatgctaa gtttgctaaa aaaaaaataa 300  
 aaaaaaatgg aaagcaaaaa tagaaaagga gataaaaaag gcatggaaaa tttatttcca 360  
 attagaaaga tgtattagga aaaggggt 388

<210> 4371  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-F9

<400> 4371  
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 tccagactgc cgctgctcag catgaggaga acgctaattg gcaggacctt gtcctcctgg 120  
 atgtcatccc aatgtctctt ggtcttaaaa ctgctggagg agtcatgact gtgctcatca 180  
 tcaggaacac caccatcccc actacgaagg agcaggctct ctcaacctac tccgacaacc 240  
 agcctgggtg gctcagccag gtgtttgagg gtgagaggac tacgaccagg gatatcagcc 300  
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<210> 4372  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-G1

<400> 4372  
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 cggatcgagt cggcgagagc gagggcgagg acgatggcgg cgctccggt agcggtgagg 120  
 aggttttgcg accgtgctg cgaggatca gcgggcattt acgagctcaa ggctgccaag 180  
 gaattccccg acattgatcc tgagcatctc aaggctgcca ggaaattctc caaacttctg 240  
 gtcaaggatg ccgatgctac ggctctgaat gtctccaaga ttctccgggg cagtccagtc 300  
 gatggtcata aagatgtaac ccttcgtgaa gaatgtctac ggctctgaat gctacggctc 360

tgaatgtcca cggtcttgaa tgcctcatg a

391

<210> 4373

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-G10

<400> 4373

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tcatcttcat gggaggagt cgtcttgag tcgtcggatg agggatctga cacctccagg 180

tggcaggcac tcttccgagt ccccgaggcc atcttcttga ccttcttctc cggcaccaca 240

tggggtgccg aaaccagcag ctcgccaaa cgagcgctcg ctgggccttc gggcaaagga 300

gccggatagt tgatctgttc ggacgtctcc tgccaatcct gtcaaaggta agggagctta 360

gatcccgcat ggagtcaaac tatgaaaaac tgataccctg aaaaaaaaaa gagaaggac 419

<210> 4374

<211> 449

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-056-Q1-E1-G11

<400> 4374

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ttggaaaaca gatctcctcg caagtttcca cgaagggtgt tccaggcgat tcatgtaatg 120

gcagaatgac taaaaggggtg gactcgaagt caaagaaact tgtgagatat ccagtaatga 180

agttgtggct tcggccaaga caattatcac taaagcaaca aaagaagaag cataagaaaa 240

ccaaaaagcg tgtaaggac acggccagtg ttgattgttc tggtgacaac agcagtgagc 300

agcaaacatc aacatcagca actgtgccgc caaaaactgc agaacttaca tctcgtaaac 360

ggaaatattc ccatgccagt gtaagttctg aaaacaacac ccaagcgctc aaagacaggc 420

agcaagctgt tggagcaagt antgctggt 449

<210> 4375  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-G12

<400> 4375

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 tgagttcttt ttactaatgt tgagtccatg gattatacgc acttttacct tcccatcatt 120  
 gctagcctct tcggaaccgt gcattgccct ttctcacctt gagagttggg gcaaacttcg 180  
 ccggtgcatc caaaccctgt gatacaatac gctctatcac acataaacct cttatatct 240  
 tcctcaaaac agccaccata cctacctatt atggcatttc catagccatt ccgagatata 300  
 tttccatgca actttccacc attccattca tcatcatcat gacatacttt acttttgtca 360  
 tattgccact gcatgatcat gtagttgaca tcgtatttgt ggcaaagcca ccatgcataa 420  
 attttcatac aagt 434

<210> 4376  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-056-Q1-E1-G2

<400> 4376

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 ctactgcaca tgctccagtg catataaatt ggttgaaaaa tcaaattctt gtccttgggt 180  
 gcatgcttag gtcccatgca agaaatggga atgaatttca aacaccaggg caccattgat 240  
 tgctagtaaa acattgagat gcctggtttt taaattctag taaattcaaa actcgtctga 300  
 aattcatgaa acttggcatg ctatcatgga gcgggatcaa catgccgtgg taattttttt 360  
 cccatttgga gcaagtttgg gtanatgctt ctcacaaacc agagcttctc aaaacaagca 420  
 tgatg 425

<210> 4377

<211> 362  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-056-Q1-E1-G4  
  
 <400> 4377  
  
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 gatcatgaga ttcttatcag cagtcgcgga catgacagtc cgtgacatct tcgtctgcag 120  
 cctcgccttc atgatgtgtg gatggggcct gcttcagagt gtcacgcta tccatcttgt 180  
 cgtcgagatg gtcgggctgt gggggctctg gaacgctctc gcccggggct atcagatcct 240  
 gatggggctc ctgctgttct agcacatcgc gttccttgcg tggttccccct ttgtgtccga 300  
 gttccagagc tggatgcttt tctaccagtc gttcagcagt cgcctgcaga tctcccgtat 360  
 cc 362

<210> 4378  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-056-Q1-E1-G5  
  
 <400> 4378  
  
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 gaggtagtagt ctattacctg ttttattatc aaacctttgg gagttacttc tacgtttgcc 120  
 attatgctat gctatgctag tagacgtgga ttgggtgagt gatattcatg acagatgtga 180  
 gtttttttta ttaatggttt atctaagatg gcaacttaaa cacagatctg ggtggattga 240  
 ggtacctggg tattccaggg ttgcctgttt cttttggacc gccaccagg ctcaaaggga 300  
 tcatgagatt attcatacta gaaactttcc tgtgcagcca caagccatta tgggctctgg 360  
 catagttgaa taagtcgtgc gaac 384

<210> 4379  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-056-Q1-E1-H1

<400> 4379

gggtccagac ggccaccata gttcaaaggg tgggtgctct tggcatggtg atgcagctgc 60  
cgggggaaga tgccgagttt gaactctcga ggaagcagat gctggcgact ctggatgtca 120  
tgatgggagg gctggtggcc gaggagctta tagccggaga aggcggggtc accactggtc 180  
cctcaactga tctaagcgag gcgactcagc tggcgaccga catggtcacc aagtatggca 240  
tgggcaagcg ggtgggcttt gttacctata gcaatggcgg tgatgctagc agtggcaagg 300  
cgaccaacat gagcgagcgg atgtcagaac tggttgacga ngagggtgaaa gatttactgg 360  
acaacgctta cangaacgcc aaa 383

<210> 4380

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-H10

<400> 4380

ggtctacaga taactacaga ctgttctgtt tttgacagat tctgttttgc gtgtgttgtt 60  
tgcttatttt gatgaatcta tggctagtaa aatagtttat aaaccataga gaagttggag 120  
tacagtaggt ttaacaccaa taaaaataaa gaatgagttc attgcggtac cttaaagtag 180  
tattttgttt tctttctcta acggagctca cgagatttct attgagtttt gtgttgtgaa 240  
gttttcaagt tttgggtgaa ttcttttgat ggattatgaa acaaggagtg gcaagagcct 300  
aagcttgggg atgcccattg ccccccaag ataatccaag gacatcaaaa agtcaaagct 360  
tggg 364

<210> 4381

<211> 304

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-H2

<400> 4381

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tttcagacct ctccaccaag ggccacgaaa ttccccctct cttcctccat atatacatcc 120



cttaaggcaa cgttttagact ttgggttttg tttagattaa aagttcgcca tagctgcaac 180  
 ttgcgcgtact tcgtttgtgt tcaacgacca gacaaaggcg tcacagaacc ccaccttgat 240  
 caataaagct ttcattcttat attcgcaata tccagattgc aatcttaggt tcttgcatgt 300  
 tctt 304

<210> 4382  
 <211> 279  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-H3  
 <400> 4382

attggatgat ataatcaatt tgatgcttga taattgtttt gagatatgga ggtagtgata 60  
 taaagtcatg gcaattgggt gaatatgaaa ttaaagaaag cttgtggtga agtttgtgga 120  
 tcccgttaca tgaacttagg ggaaccgctt tgtgaagaat ttggagcaaa attttattta 180  
 ttgagtgtcc tccttaagag tggcggtcgg ggacgagcga tggatattttc ctacaaatct 240  
 atccccctaa ggaacatgcg cgtagtgctt tggtttttg 279

<210> 4383  
 <211> 242  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-056-Q1-E1-H4  
 <400> 4383

cgcattgtgc ttcaagcggt ttacgatacg ctttgctcca tggcgcgggt gcaatccatg 60  
 gatacaaaat tagtatactg tataactatgt gaaagtcgaa ggccggggctt ttctgcgca 120  
 gtaggtggca gggcagttcc acctagtcgg ttctacatag atacgagaag accagtgagt 180  
 acgttgtttc aaacgcacgg ctgtgtgatt tgacaacgag ttactgctgg acaggtgggg 240  
 tc 242

<210> 4384  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-H5

<400> 4384

attcgccggt cgacgggagt aggaggatgg actgctttcc cgcccttcag atgcacaggg 60  
actgggtgag ggacgtcgcg tggggcgcaa acctagggct accaaagtcc acgatcgcca 120  
gcgcttctca ggatggaacc gtcgttatct ggaccgcgcc gaaagaaggc gagcagtggg 180  
aaggcagggt cctgaatgat ttcagaacct ctgtttggag gctgtcgtgg tcgctgacgg 240  
gcaacatctt ggcggtctct gatggcaaca acaatgtgac cctctggaaa gaagctgttg 300  
acggcgaaatg gcagcaagtg actaccgttg agccatagat gttctgcgtt ctgcctctag 360  
gttcttttagt aattactata tcataaccaa tgtaattttg cc 402

<210> 4385

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-H7

<400> 4385

attcgccggt cgacgggatt cacggaaacc ccacaacaac atcttgtttt cgtgctcgct 60  
gttcgcgctt gaaaatggat gtagcaaaaa cttcgccgat attagcaaaa tccaactatg 120  
gttgacgcaa agatcatcat cgccgccgtc gcgaggteat agctctgcct tgatggagggt 180  
agcacaatat ttcgctggta gtaccacaac acatctacgg ttacagcaaa acttggtatc 240  
gccggtgcc cactccatc ctctttgtat aaaaaatgaa gccggttgta gcaaacaacg 300  
gagttgggtg cagcttttcg gcgtcgtcca tggcttctgt agtctatggg tgaagctttt 360  
tttgccgccg gttgaatctt tt 382

<210> 4386

<211> 328

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-056-Q1-E1-H8

<400> 4386

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agaccttggc ttgctcctcg actgggagtc acagtacctt ggggcactct gcctcnctcn 120  
cagcagccgt cncagcccc gtctttctac tggcctcagc atcaggccta cagcaatttg 180  
ccccacagt cttgaagata tgtatgcttc agagatggca atgtcaccga ggttcaccan 240  
tgatcaaggt cactcagcct actcancaag ccacanatca gccatcctta acaggcttca 300  
tcagcagaag ggtctcctct cacctgtc 328

<210> 4387  
<211> 432  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-056-Q1-E1-H9

<400> 4387

tccacgggct ctatccacct aggagcatgc gcgtagtact ttctttcgat aactaataga 60  
tttttgcaat aagtatgtga gttctttatg actaatgttt agtccatgga ttatacgcac 120  
catcaccctt ccaccattgc tagcctctct agtactgccc aactttcacc ggtaccataa 180  
accaccata taccttcctc aaaacagcca ccatacctac ctattacggc atttccatat 240  
ccattccgag atatattgcc atgcaaattt ccaccgttcc gtttggtatg acatgcttca 300  
tcattgtcat attgccatgg atgatcatgt agttgacatc atatttgtgg caaagccacc 360  
gttcataatt tttcatata tgtcactctt gattcattgc atatcccggt acaccgccgg 420  
aggcattcac at 432

<210> 4388  
<211> 351  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-A11

<400> 4388

cgacaggcaa cttccttaca gagggtcctt cattaagggt tcacgttgat ccaggggtgc 60  
aggctcctcc ctgggagagg tgcttggtg agcttgatgt ttgtgatgct gtgtagtgaa 120  
tgatgcagca tatggactgt atcatctgtt tgccatgtag cgctgtaagc catgtgtttg 180

gtttcagcaa ttgttttagct gcatcaatth acaccgtgcg tcaagttcat cgggtgtcgaa 240  
gctgacatcg tgtctagaat gcaccttgcc ttggaactga cgttttcaa ctaatcttgt 300  
ttacctcata atctgggtgta gctaaaaact tgggtgtgcct aaaaaaaca t 351

<210> 4389  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-057-Q1-E1-A2  
  
<400> 4389

gggtccacgg cggaggagga aggaaggaga tggacttctt tgtgacgtgt ttaaaactat 60  
gtggtttttt tgcaaaaaaa caaatacaact gccccatgga caacttttcc cggacggagg 120  
gagtactagt taaatctgag ctatgggtgt gaagcactga tatgccagta catttgattg 180  
tgacctattc taattttgta cctgaacttt ttttagaaag ggttgtacgt aaacttaatg 240  
tgctagcaga acttattgtg ttgtctatct gttttctttg cacaacattc aagatatttc 300  
cccatcattg ataaagacga tgaaccgtta tgtacgaact cgttggtttc aacatagccc 360  
ttencgtagt gatccgctgc ttccatcctg 390

<210> 4390  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-057-Q1-E1-A4  
  
<400> 4390

cggctgtagt ggaggaggcg gtgccggctg gccagcaggc ggaggaggaa gcaatccttc 60  
acccttgagg attcagggtta gccagtgaca cttcagggtg gtgtgggttg acggcttcgc 120  
gccactatgg aactttagg gagcatcaag ggttttctca taggagaagg cgggcagcca 180  
agcaggcttg ccacccttct gacgcttggg gccgggttga ccctctggct gctgatcttc 240  
cactgacgcc acttgccagc tgggtggaagc cggctgcggg gccttgcgct tgttgtcctt 300  
ctgttgctgg caccgactgt tatcaccaac ctgcgtctgg ggagccatag ggagcacttt 360  
cccagatgcg tccactcgga gctccgactt c 391

<210> 4391  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-057-Q1-E1-A5  
  
 <400> 4391

ggaacttgat gcccctgaga tgaatgtggg cagcttggat gatcatgtcg agatagacat 60  
 caacagtgac gacgacgacc tggagtacac gatgaacaag atgtctataa ccccgcacca 120  
 ctctttctta caccagatgg ccatggacag cgacggcggc ctcagcatgc cagcgaggat 180  
 cagaccatcg acaagccctc cgtcgcggtg ggccatgtca ggagaatcac catagatgga 240  
 agaaacagct ggatacttgg ggctgtacaa ggagggtatg actgtcaaac tgatacgggg 300  
 agcttagttt gtagtggggg caaagaaccc attcatttgc agtgtattca gcccaagtaa 360  
 ttcgaaaatt ttgggttgag agtgtgaagt acagatgttg ttagaaaacg t 411

<210> 4392  
 <211> 321  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-057-Q1-E1-A7  
  
 <400> 4392

cgggggatac gagaaagatt ccggctctgt ttcttggcgc accgcggcga ccggccgacg 60  
 agcatccacc gcctccaagc cgctctctct cactgcagca gcgtagcgac ttcttctctc 120  
 agctgcagag cctctccgca tcaagagttc cttgccatgg agcatggact gtggtcgagc 180  
 ggagctagcg acaagaacaa ggccatggtt gagcaactgc agagatatgg ggtaatcaag 240  
 tcgagcaaag ttgcggaggt catggagacc accgataggg ggctgtttgt gcctcagggt 300  
 gggctctcca attttgatag c 321

<210> 4393  
 <211> 200  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-057-Q1-E1-B1

<400> 4393

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tgccttatgc ggtggggata agggatgtgt gatgtgcttg tgtggcgaaa ggcatgagt 120  
ggcttttccct ttttgcggga ggctgttcat ttttgtctat tctagtttta tattcacgat 180  
acatacaatt agttatcacc 200

<210> 4394

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-B2

<400> 4394

tcacgggaga tatgacgcac gtgacgcaag cgttcgtata caccgcgata tactcatccc 60  
tatgaacgca tacacgcaca ctctatccct atgagcatct tcgaaatact gattcgacat 120  
atcattttta aaacttacga agtcatcgta gtcacctacg tctcatccca ctgaatacgc 180  
attgccagaa atcttgaagt aaatccagga acacatgcgg gcaccaagac ttaattctga 240  
tgggttggga taccacagtt cctctaacca tccaatcaca ggggtgggttc gctacgaagc 300  
acgttattga aatactacct ccctctgggt gcacaggtta tacacgtagt tctacg 356

<210> 4395

<211> 55

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-B4

<400> 4395

agaccaccgc aggcaagaag cccaaggccg aaaagcggct gccggcgggc aaaac 55

<210> 4396

<211> 352

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-B5

<400> 4396

cggggaatcg gcagagctcg cccgctacaa caagaagccc accatcacct ctagggagat 60  
 ccagacctcc gtcgcctcg tctccccgg ggagctcgcc aagcacgccg tctccgaggg 120  
 caccaaggcc gtcaccaagt tcacatcctc ctagactgac ggcgtgcagt tggtttctgc 180  
 atctgcatct gtactcttga ctctgcttat ctatctatct gcaagtagtg gtggtggtag 240  
 tagtacctgt gctgggtgat tgccaacgct ttgttgcccc gttggttgta agagctgaag 300  
 ttgctgcttt ggcaactga aatctatcta gaactgaagt tgtggtccta aa 352

<210> 4397

<211> 379

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-057-Q1-E1-C1

<400> 4397

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 accaaaagac atgaaaggaa gccatagaat ccagaaccca cggggatgta cttattgtg 120  
 taatggtggt agctcagcgc cataagacaa cacacatoga agaagaacct gaagcggcga 180  
 ttgtacgttt taagtctcac aatatcccc tcagttgagg agacaattga tgatgtcaaa 240  
 gaggtgtgta ntgtgctcca tgttgcgcat gtggcgcttc ttcttgaagc aaccagattc 300  
 acgtgacat cctgttgca gtagctgcag tgactgcggg agtgaccctt gccaacagaa 360  
 ggagaaggca agaatggtg 379

<210> 4398

<211> 280

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-C2

<400> 4398

gatcgccgag cctagccact cccccgcgc atctggagcg acctcccacc gaggtaaacc 60  
 cccaaaacct agtcgccgtc gccggcgccg ccgcagccgc agcagccatg aacgccttca 120  
 ggttcctcgg ggacatgacc cacctcttct cggtcacgt cctcctcctc acgatctacg 180

ccaccaggctc atgctcaggg gtgtcaagga ataccaggga gctgtacctg gcgggtgttcg 240  
 tggctcgcta cctcgacctc ttcactgact acatctcgct 280

<210> 4399  
 <211> 160  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-057-Q1-E1-D1  
 <400> 4399

gatggttgag caggaccacg tggagggctg gttgaacagg accccgtgga gggctagtgtg 60  
 agcagtagct taagatttcg aggatcgaag cccattgttg ataggatttt gatatgcata 120  
 tgatgtccta tgtatagcat cgagattgat aattgggatg 160

<210> 4400  
 <211> 351  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-057-Q1-E1-D4  
 <400> 4400

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 ttttggtgaa ttgcactgat tctgcaccgt cacttgcctt gtaaccaatg acgccgtgct 120  
 ggatcagcat gtaggtgtat ccaagtgtgt agaatcttgt ccttttactt agcccgcgca 180  
 cttcgcagtc ttgcactatg aaccatattg cgcagccggg ttacactaca tccgacagga 240  
 tgacaatagg ccatgtacac atatggttaa taaaaaacgc ttgcaattta attacctact 300  
 ataccaccgt cctgggttaa gtatgattta actaataaaa tatgaatgca t 351

<210> 4401  
 <211> 236  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-057-Q1-E1-D5  
 <400> 4401

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cggtgatgcg cgccgcccgt gctctctgca gatctgactg agggtcagca agtttttgaa 120  
gataatgcac aaacttttaa attagtttct tcgtttatc tcttagattg attctcttgg 180  
ggtagcactg atagctattc cctccgttcg gaattacgtg tcgcagaagc agaggt 236

<210> 4402  
<211> 410  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-057-Q1-E1-E11  
<400> 4402

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aatcgatttc ctccgttggg tttcccgac ttcattgctgt ttgagaaaca gatgaccgag 120  
acacagtctt tcagaagcat taactctaac tccgggtaga cagtaccaac ctacatccct 180  
ctacatctgc gagcctacca cttgaagagg tcatgcaact tactcaacta tgtttagagcc 240  
cataatagct tgtggctgca cacggaagtt tctagcatga aatatcttag atccctttga 300  
gcctgggtgg cggaaccgtg gattgtcaca cgggtactcc gggatatcct aggacaacac 360  
tggattctcc aggtgcccc acaagcaatc cacctagatg tgtattaaag 410

<210> 4403  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-057-Q1-E1-E2  
<400> 4403

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agttccttca gcagtgggat atggtgctct gtatctgttg acagcttttc ctgtcattat 120  
tggaatatca gttgtgctga tccttttcta caactctcta cagtagcatc tgctcacctt 180  
tgtttctgaa gaagatgccg cctttttctt gtaaagccga gttacaacgc tgctgaatga 240  
gcaccccttt ctctgtctca tagtaaaata gtttctgcaa tggatgaca acattgtaaa 300  
gccttgaggt tgtacactac acgaaaaagg aaaaggctct gaagtattgg ctttttctag 360  
gaaactgaaa gttgattaag aaaaacaagg gaaccagtc aacggaaaaa gcggcgc 417

<210> 4404  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-E3

<400> 4404

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 cctggatcag taatgctgac accacacagt acatcgaagg atttatagca gagtggcaat 120  
 cacacactta ttacatcggt gtctcaaaga gaacttatta caataaatat ggcttaaggc 180  
 catctaataa cgataacagc ggaagactcg gaagataaat ggggccatca actccaacgg 240  
 catcactgag tatagaacca cgacctaaaa gcaccttact cgtcgtctga aaagtctgca 300  
 acatgaaagt tgcagcccga aaacgggtca gcacatggaa tatgctggca atgtaacaca 360  
 tagagagtaa tggaatgaaa caactatact atatgcatat atggccggtg gaaaact 417

<210> 4405  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-E4

<400> 4405

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 gtttcttctt ccggcgatct tcgacgacct tccaagatcc cacaaagtca ccgagagtaa 180  
 gagcagtgag acgcacctta ggtaatggtc ccttccatgg cctgatcgct gtcgtcgccg 240  
 ttctctgatg aacaactcgc cggaccatct cgtttttctc tcctgcatgt aaaccgatcc 300  
 ttgtcggatc atcaagggga atcaccttgt cgacagttaa tgacacgccg tcctcatcgt 360  
 aactgaatgg aaaaactcgc agatcaagtc ag 392

<210> 4406  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-E5

<400> 4406

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gaactggttc atttgggatt gtcttccagg ctaagtgctt ggagactgga gagactgtgg 120  
ccatcaagaa ggtgctgcag gatcgccgtt acaagaaccg tgagctgcag cttatgcgct 180  
ccatggacca cccaatgtc gtctctctga agcactgctt cttctcgacc acaagcaggg 240  
atgagctgtt cctgaacctt gtcattggagt atgtccctga gactctatac cgtgtgctca 300  
agcactacag caatgccaac cagcggatgc cgcttatcta tgtcaagctt tacatgtatc 360  
agcttttttag agggctagct tatgttcata ct 392

<210> 4407

<211> 371

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-057-Q1-E1-F2

<400> 4407

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acatgcccat gatcaggaaa acataaccat catgcaacac ttgagctagt cttagaggcc 120  
agactangaa tacatctttac cgctttattat tccacatgtg catatgagtc cttcctccga 180  
gcctcggtgt tattgcagac tcgagaacca taacagttat agcatggaac ataaacataa 240  
ttatgaactc ggagataaat aatatcattt attattgcct ctagggcata tctcctacag 300  
aaaacacaca aaaaagtata agaatacaac acagcacatt tagggcatca ctaacaaaaa 360  
ggaagctgtt g 371

<210> 4408

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-F3

<400> 4408

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ttgttgtaac atgaaaagcc agcattcaag tttcagcaaa tattatgaac taaccatact 120  
 cacaataaca cataggtctc acaattactc gtatcaatag cataatcagc tagcgagcca 180  
 taataataaa actcggatga caacactttc tcaaaataat cataacatga tataacaaaa 240  
 tggatatctcg ctagcccttt ctgagaccgc agaacataaa tgcagagcac ctttaaagat 300  
 caatgactga ctaaacattg taattcatgg ttaaagagat ccagtcaagt catacccaat 360  
 ataaaccaat aataatgaat gcaaatgaca gtgtgctccc cagcgggtgc 410

<210> 4409  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-057-Q1-E1-G2  
 <400> 4409

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 ctctgttaag gtgttttagtg atggacagac ctctccttct gcatgccagg gcgagttatg 120  
 aacatcattt tggctgatag tgtcaggcat ttctttcata ataagttggg tttgataatg 180  
 aagaatcaaa aaagatggcc ctgggtttttt ttgttcaaag agagatagat ggccctagag 240  
 ttgggaacca agtaatgggg gaatgcttct gtgtcattgt gtctatactt ttttcttcta 300  
 gcagtgtatg tttagatggg tagagtccat gtgaagtggc ttctaaactg ttccatcaga 360  
 atgccacctg ttgtaatttg taaacaagaa tcgacttgct gcagtttgat gt 412

<210> 4410  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-057-Q1-E1-G4  
 <400> 4410

cggctcgacg gggatataat cccatcagag ccacttatgg agtgcctacc aaagatgaca 60  
 atacctagat ctatccttgc ttttatgcct acctaggggc gttaaagat agcgcttggt 120  
 gggaggcaac ccaattttat ttttagtttc tttgtttttg cttctattta ggaataagta 180  
 atccatctac cttctgttta gatgtggttt tatcttttaa ctagtgttg tgccaagtta 240

aacctatagg atcttcttgg atgatagtta tttgatcttg ctataatttc cagaaacttt 300  
 ctgtgtcacg aaaaaaattg ttaaaaatca ccagaatgtg attccaatgc tactgattaa 360  
 taaaaaattt ggctaagtat tcctaatttg gctgaatttt t 401

<210> 4411  
 <211> 301  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-H10

<400> 4411

gggccgacaa gactatgcag tcatcaagag acgcagccga gagaccgatg aaagccgaat 60  
 ggagacggtg aagacgcgga tcctctgttc catttgagta gcgtggcgac ggacgtttgg 120  
 gtggacggca gcttgctcct ctgattgttt tgcttctgat gtaaaaaatg ttctctctgg 180  
 tctgctgccg cgacatcaag gggacctgct taatttgttg tgggtgtgcc tacctggtgc 240  
 ctgagtttga cttaatttta tagggttttg cgacggctcct gccgcctttg gcttgtgtcc 300  
 t 301

<210> 4412  
 <211> 82  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-H2

<400> 4412

aatcttcaga aaaaaaggac ttcaagttct agacggcgcc gttttgttac tgttgctctt 60  
 ccgcttccca ggaggaggat gt 82

<210> 4413  
 <211> 82  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-H6

<400> 4413

aatcttcaga aaaaaaggac ttcaagttct agacggcgcc gttttgttac tgttgctctt 60

ccgcttccca ggaggaggat, gt

82

<210> 4414

<211> 362

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-057-Q1-E1-H8

<400> 4414

ggggctctct tgcactcatt atatctatct agagagatga caggaattgg tcattcacgt 60

ggttagtcat aaaatcctac ttaaaacttg tagatcactg aatatgatat gtttgattcc 120

ttgcaatagt ttgcgatat aaagatgggtg atattagagt catgctagtg ggtagttgtg 180

gattagtaga aatacttgtg ttgaggtttg tgattcccgt agcatgcacg tatggtgaac 240

cattaggtaa cgaattcgga gcatgaggta ttatttgatt gtcttcctta tgattggggg 300

tcagggacaa gcgaggggtat tttccaagaa acttatcccc ctaggggaat gcttagtatt 360

ac 362

<210> 4415

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A10

<400> 4415

cgacggtaga ggagcccaca tcaacctcaa ggtcaagggg caggatggca atgaggtttt 60

cttcgcgcatc aagagatcca cacagctgaa gaagctgatg aacgcttact gcgaccgtca 120

gtcgggtggtt ctcaactcca ttgctttcct ttttgatggt cgtaggetcc gtggtgagca 180

gacccctgat gagcttgaga tggaggaagg cgacgagatc gacgccatgc ttcaccagac 240

cggaggggtgc tttcctggcc cttagaagga gcttgctgca gcctggctgt tctatgtcgt 300

atgctacctt tagaactaga gtaaaatgta agaagtgaaa gaacttgtga ggctatggtt 360

ctgtgccata gcctgagggg ggggtctggag gtgaaacaac atcggagtac tgttgatgtc 420

gtgactgaac t 431

<210> 4416  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A11

<400> 4416

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 caacccaag gttccccatt tcgctaaccg gaatccggac ttgttggtcc tgcaattcaa 120  
 ctagaagaag cacaattcca tgtgctacag cctcaatgtc aatgtcctcc ctttcttcag 180  
 gttctacagg ggagctcagg gcagggtcag cagcttcagc tgcaccaatg caaccatcaa 240  
 gaagttcaag gacgccctcg caaagcactc gccggacagg tgcagcctcg gccgggcacg 300  
 ggggctcgag gaggcggagc tcttggtctt ggctgcaaac agggacctgg aattcaccta 360  
 caacgagaag ccgacgctgg tgccgatcgc cgaggccatc caaatggaag ctgcctcc 418

<210> 4417  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A12

<400> 4417

gggtcgaggc ggattactac agaaagtctt atttttgaca gattagggtc ccaatgtggt 60  
 gtttgcttat tttgatgaac caatgattat tatcgagggg tatgacccat agaaaatttg 120  
 gaatacagta gatattacac caatatgaat ttacaaggag ttcacaatag taccaaattg 180  
 gggattaatt tcctaataca aacggacctt acaattttcc ggtaaatttt tgtgttgtga 240  
 agtttcaagt tttgggtaaa gattcgacgg actatggaat aaggactggc aagagcctaa 300  
 gcttggggat gctcaaggca cccaaatgta atattcatgg acaaccaaga gcctaagcct 360  
 ggggatgccc cggaaggcat cccctctttc gtc 393

<210> 4418  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A3

<400> 4418

tcgacgggcg agaacaaatg agattatctg ttgagttttg tgttgtgaag ttttcaagtt 60  
ttgggtaaag atttgatgga ctatcgaata aggattggca aaagcctaac cttggggatg 120  
cccatggaac ccaaataata ttcaaggaca accaaaagcc taaccttggg gatgccccgg 180  
aaggcatccc ctctttcgtc ttcgtcaatt agtaacttta cttggagcta tatttttatt 240  
caccacatga tatgtgtttt gcttggaccg tcttgtatga tatgagtctt tgcttttttag 300  
tttaccctaa tcatccttgc tgtacacacc ttttgggaga gacacaacat gattcggaat 360  
ttattagaat actctatgtg cttcacttat atcttttgag 400

<210> 4419

<211> 331

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A4

<400> 4419

cggtgccacg gggagggggc taagctctgt tcgtcgtcgt ctgttagtcg tcctcttagc 60  
ctgatgtgtt catcgggtgga aatgtgcgtg caattgtttg ttcgtgtctt ggcccatgta 120  
ttgtgtctgt cctgagggtca caatcttgct gtcatcatta cctgaaatga aaatgttgca 180  
atcggttcta agaaaaaaaa cattaaatca acaacaaata ataacattaa atgaaaaata 240  
aaattttaat caacacacta aaaaatgatt ttgcatgaaa aaaaaagggg gcccccaaaa 300  
gggttcaagc ttaatttacc cttgaaagca a 331

<210> 4420

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-A7

<400> 4420

ctgtgtaact gaatctatcc aggggctggc atttttcgat aaagggtgaa ttttattgac 60  
tcgaaataaa gcatcaagtt gatataaaca cgatgacaac atacacggcc tctgcataat 120  
taagacgcac ataaccaata ccaacacaca cacaatgtac ccgctagcaa atagcaaggc 180



catatacgac cacagcattg cataagcgag agaaaaaccc gaagcgaagc gaacaaatct 240  
 gcgatcgaca aactacaaca atgaccatat ccacaccaac catctcatga tatkataagg 300  
 acaacgggggt tcttcaacag caacgccttc atgatgagag caacgctcga gagccgccgt 360  
 catcggattc aaccaccaa ggtaagactc taggttttca ccctga 406

<210> 4421  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-058-Q1-E1-B1  
 <400> 4421

gagcatgcac gtaatgcttt atttttgatg acttataaat ttttgcaata agtagatgag 60  
 ttctttttac taatgttgag tccatggatt atacgcactt ttaccttccc atcattgcta 120  
 gcctcttcgg aaccgtgcat tgccctttct caccttgaga gttggtgcaa acttcgccgg 180  
 tgcattccaaa ccccgatgata caatacgctc tatcacacat aaacctcctt atatcttctt 240  
 caaaacagcc accataccta cctattatgg catttccata gccattccga gatataattc 300  
 catgcaactt tccaccattc cattcatcat catcatgaca taactttactt ttgtcatatt 360  
 gccattgcat gatcatgtag ttgacatcgt att 393

<210> 4422  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-058-Q1-E1-B12  
 <400> 4422

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 tataccttcc tcaaaacagc caccatacct acctatcatg acatttccat agccattctg 120  
 agatatattg ccatgcaact ttccactggt cggtttacta tgacacactt catcattgtc 180  
 atattgcttt gcatgatcat gtagttaata tcgtatttgt ggcaaagcca ccgttcataa 240  
 ttctttcata gatgtcactc atgagtcatt gcatatcccg acacaccgcc agaggcattc 300  
 acatagagtc atatttggtt ctaagtatcg agttgtaaga aaataaaagt gtgatgatca 360

tcattattag agcattgtcc caagtgagga aaggatgatg gagactatga ttccccacaa 420  
gtcgggatg 429

<210> 4423  
<211> 373  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-058-Q1-E1-B2  
  
<400> 4423

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tgagaagagc ttctaccagg caacaccaga gaggcaccca tacccttacg aaaggcagtt 120  
tgtgtacggc gctgaggccc accaccaccc tacgatgatg aacgcggctc cctacaccat 180  
ctcaccgcc caccgcgct actacggtaa tggctacccg gtgcagtacc agatacctta 240  
catccactaa tgggggagag ctacaatggc tctttccaaa ctageccctag cttttaacct 300  
tccgctgttg ttgctattgt accaactcat ctaccaatct tgcctagctg aaaatagttg 360  
gaccactcgc ttg 373

<210> 4424  
<211> 379  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-058-Q1-E1-B3  
  
<400> 4424

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ccccttacgg atgcttgggg tgtagacgac aagcttcacc tgaatctggt ggctttgact 120  
gatgaggacc tggccgcac tctcctcctc ttggtcgggg atgactagga gtatccgccg 180  
agtgccactg tccccttggt actccgcaag gacagggcgc aggtgggtggc tactatgccc 240  
acatttgatg ggcgctcct ggtgccactg gcacccttg tggccggga gcaacggcgc 300  
cgggtggacgc gtcttcgggc gactccctca gangaggagg tgaggaggaa gacgaggagc 360  
gtgactcgga ggtgacccc 379

<210> 4425  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-B4

<400> 4425

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 cttcagatga gttaacgtag atggctgacg cagaggacat tcagcccctt gtctgcgaca 120  
 atggaactgg aatgggtcaag gctgggtttcg ccggagacga tgctccacgt gcagttttcc 180  
 ctagtattgt tggccgtcca cgccacactg gtgttatggg agggatgggg cagaaggatg 240  
 cttatgttgg tgatgaggcc caatccaaga ggggtatcct gactttgaaa taccocattg 300  
 agcacggaat cgtaagcaac tgggatgaca tggagaagat ttggcatcac accttctaca 360  
 atgagctccg tgtagcacct gaagagcacc ctgttcttct tacagaggct cctcttaacc 420  
 c 421

<210> 4426  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-B5

<400> 4426

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 atgcaacgtc aaaacactac taaatgttca cctagctgca tgtcattggc cgatgatgaa 180  
 caacttcatg actgggaaat ctcgggcggt acacaagtta atgccctagt atcacaccgg 240  
 catttggaaca tatggcgtag tagtgaaaat gactcatag atggcatttc ccaagatgtg 300  
 cgcattcgga agtgagactg gaatgctcct ggtctcggcg catgaaccgt cgggtggagtc 360  
 gtgggttagtc ccagcgtgac tctacatttg ccagatgctg atagcccgtt cctttcactt 420  
 tcctcc 426

<210> 4427

<211> 399  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-B9  
  
 <400> 4427

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 ttatatatca atgcatgaat gacagtacaa gtttggtata gggcttaaag aatagatggg 120  
 ttacattcaa ttctcgtcg gaccggcact cagtacttat cattacatgg taaaactatc 180  
 aattgcactt ggtggttatc acagagttga gatcaagata ctaacacaaa atcatagttt 240  
 ggtggtggat tacttcatat tcatcatgga ggcagcggag aagttaatgg agaggctgga 300  
 gatgtgacca agagagtttc tgggtgcagt ttccgggtcta atcttcgttc ggcggcagcc 360  
 ttctagggtt tttgtctcat attaccaac ctaatttgc 399

<210> 4428  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-C1  
  
 <400> 4428

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 ttaaggttct attatgaagt aaaatatgta atattcataa atgaatacaa cgggtacgca 120  
 atttttgaaa tggaggctat gtaatcatat gaggtaacac ttttaagtag cggactacaa 180  
 tatccatttc tttttgtgcg cctctacact aacacgtcaa tgcattatgt ttaaagtaaa 240  
 taaccaattg cactaaatta tctatttaca cgagaaatac ataggctgag cgtttgatcc 300  
 cttttttgtg atcgcgccac tacaccgta cgattggccg cgcccgctg aatgtccaag 360  
 ttatcgggtgc atcatccga gttattgtct ttttttctgg ggtggacttc acaccagtta 420  
 ttaactgctg 430

<210> 4429  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-C10

<400> 4429

gggtcgaggc gaagatggac gccatctact cgacctcgtc ggcggcggcg agcggtctggg 60  
gctacgactc cctcaagaac ttccgcgaga tctccccgcg cgttgccagtc ccacctcaag 120  
ctcgtttacc tgacctatg ctttgccttg gctcatctg ccgtgggtgc ttacctgcac 180  
attgccctga gcatcggtgg gatgctgaca atgctcgcgt gtgttggaac catcgcttgg 240  
atgttctctg tgccagtcta tgaggagagg aagaggtttg ggctgctgat ggggtgcagcc 300  
ctcctggaag gggcttcggt tggacctctg attgagcttg ccatagactt tgacccaagt 360  
atcctcgtga cagggtttgt cggaaccgcc atcgcttctg ggtgcttctc tggggccgcc 420  
atcatcgcca agcg 434

<210> 4430

<211> 347

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-058-Q1-E1-C12

<400> 4430

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gtgtacaaga tgcaggaaaa ggagaatttc acatacccaa cagttaaagg ctttggtoct 120  
cttccaaaat ctacctcat tgcaaagca agagactcaa tcccagtagc aagagtgaca 180  
acagcaatgg caagtggcag ggtcagaaga aatgcagatg cagcagcaga atctagtgcc 240  
gggaaaaggc aagctagang agggactaga gctccaagag gaaggaggag tgctggaaga 300  
ggaggagcta cagctccaat aggagggaag agtgctggaa gaagaag 347

<210> 4431

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-C2

<400> 4431

ggtcgagata tccgggtcga cggggggaca aaattgataa tagcgacaag aaggaagggg 60

cttccgattc tgtggaggaa tcggggaaaag cttctgaaga gaaggcccct gagaacactg 120  
atgccaagga agagaagtca gatgatgctg aggagttgaa agggtcagat gcacaatctg 180  
ttaaaaagga tgataaaagc ctttcagaaa atgacaagga gccagtttca agggaggact 240  
tcaaagaata ttttgccaaa tttggcacag tgcggtatgt ggacttcagt aagggggatg 300  
attcaggata ccttaagttt gaggaatcga cggccgcgga aaaggcccgt gcatttgcag 360  
ctcttgcgga tgaaggtggt ttggttatga agggccacct tgtcactttg gaacctgtgt 420  
ctgga 425

<210> 4432  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-058-Q1-E1-C3  
<400> 4432

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canggccaan aagggcgtgg aaacttacag attcaaaacc tcaaggggct gaagcaggtg 120  
caccgggaca tcggcatctc ctccaaggcc atgtccatca tgaactcctt catcaacgac 180  
attttcgaga agtcgcgagg cgagtcggcc aagcttgcca ggtacaacaa gaagcccacc 240  
atcaegtecc gggagatcca gacctcgtc cgcctcgtec tccccggcga gtcgccaag 300  
catgcegtct ccgagggcac caaggctgtc accaggttca cctcctctta ggctgttcgt 360  
cttcctgtgt ctcgtagtta gctgttcggg tgtgtttgtg gccgtgttat cctgtaagaa 420  
tcgcaccgag atgttt 436

<210> 4433  
<211> 287  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-C4  
<400> 4433

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gacaaatggg tgggtgttggg catggggcca aaggaccacg gtcgggagge ggttctcgat 120  
acggtgatca ctccgtcaat cccttaaaca cagctccttc ggatcaaccc gaccctaatac 180  
cagcccacta tcacgcgcac aagcattgca ccgtcactgt ccccttttga ttaccaccaa 240  
cctgtaccta tttccctttt gagctccaat gtcccttta gtttccg 287

<210> 4434  
<211> 242  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-058-Q1-E1-C6  
  
<400> 4434

ggtcgacgcg ccggaagac agcgacgagc ctgaggagga gcggctgcta cggaggctgc 60  
tagcgctcta ccgtgcccgc caagcaaagc tggagtcctg ggaagcgctc gtcgcgaagg 120  
cgagcgtgga catagagaat tgcgcggagg agcttcgggg tcttcgccag gaaactcttc 180  
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aa 242

<210> 4435  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-058-Q1-E1-C9  
  
<400> 4435

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cccgtaggga gttgctgtat aacatcgaat acagtgccga gtactgaagc agtgagtact 120  
gggcaacctt ccctgatttc aacatctacc tgttatcagt acctcagccg cagtcatttt 180  
tactgattat gccttgtttg ctgattttgt ttcttccagt ttgattttga tgatgccggt 240  
gttctttcaa tcaagtaggc acgtgtagtg tttgccgga ctcgaagagc acagaggctg 300  
tagtctgtaa attatacttt gtaacagttt tccaatcat tcttcagtat cccaggcttc 360  
cttttttcgc tggagagaca ggatgagatt ttatttgta ggatttcaga ataaggctct 420  
aatacatttg t 431

<210> 4436  
 <211> 89  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-D1

<400> 4436

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 gaaggacctg gaggccctgt gtaacccca 89

<210> 4437  
 <211> 344  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-D10

<400> 4437

gagtcggaca agatcgcccc ctacaacaag aagcccacca tcacctccag ggagatccag 60  
 acctccgtcc gctcgtcct ccccgaggag ctgcgcaagc acgccgtctc cgagggcacc 120  
 aaggccgtca ccaagttcac atcctcctag actgacggcg tgcagttggt ttctgcatct 180  
 gcatctgtac tcttgactct gcttatctat ctatctgcaa gtagtggtgg tggtagtagt 240  
 acctgtgctg ggtgattgcc aacgctttgt tggcccgttg gttgtaagag ctgaagttgc 300  
 tgctttggca aactgaaatc tatctagaac tgaagttgtg gtgc 344

<210> 4438  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-D11

<400> 4438

gcaaacgaag gaattgttcc ctgggggctt gccaaaaaaa cccaaaaggc aaaccaattg 60  
 gaaaggccgg tatggaaggt tggccgggaa gggcaacttc ccaacatccg ttacaattcc 120  
 ccacccaatg ggcaaggctg gaatgtgctt ccaccctgat caggacagga tcatcactgt 180  
 tcgtgaatgc gcccgatccc agggcttccc tgatggatac catttcgctg gcaacatcca 240



gagcaagcac aggcagatcg ggaacgctgt gccgcctccc ctctcctatg cgctagggag 300  
gaagctcaag caagccatcg acgccaagcc tcgactggct taagttcact gcactgcatg 360  
atacaagtcc cgtcattttt tg 382

<210> 4439  
<211> 420  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-D3  
<400> 4439

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tccagctgct tcttagccgc ccatgctacc tgttttggtt catcggtgac attcgatgac 120  
tctggccact ttgattgccc tgtttgctat tgccgtaaag ccgctaaagc attggaaaag 180  
gctaagaaaa cataactctga agctagaaaa aaattatctg ttttctgcag cggctggaag 240  
caattttcta aggaacacag tgagctgatg aatggctttc acacagctaa aaagcaaggt 300  
aaccatcagt ctgaagcagc tgagctatgt cgcaaggatg gagagcctag tcacttgaaa 360  
gaaaatggta caagtgatgc ttgtcctgag aatgcagtca ccacaaagac aaccattttt 420

<210> 4440  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-D4  
<400> 4440

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ctgcccctca tccctctcgc cgctgcagct ccggagaagc acctcgtgac ccacctcccg 120  
ggcttcggcg gcgcccctcc atccaaacac tacgccgggt acataaccgt ggacgagagc 180  
aatggcagga gtctgttcta ctacctggtg ctgtcggagc gtgacccggc catcgacccc 240  
gtcgtgctct ggctcaacgg cggccccggc tgctccagct tcgacggatt cgtctacgag 300  
aacggctctgg attgatccta atcttaacct ccttcgggac cggcagttcc ctttgttgtc 360  
ctcctgtgaa ttg 374

<210> 4441  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-D5

<400> 4441

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 gcttgacgtc catcatctac ccggtgaaga cggatctgcg agtaacccaa catccatcag 120  
 cgcttcattg gagaagcagc aagcaactg aagctgtagc tagctctgga ggccatgcat 180  
 gcatcaatgt gcatttcatt ttactgcctg ctgcttggtta cccttttttg ttgttattat 240  
 tattatttcg gtgtagtaaa aggggaatttt tgctcctgct ttagctcttg ggtctgggtcg 300  
 tcggcggttg gttccattgc atcgcatgta gatgtcgtag tagtggtggt caaagtaact 360  
 cctctctcta gtccctagtc tagctgtagt ggctctgaaa gtattgtatc cgatgaaggg 420  
 g 421

<210> 4442  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-D9

<400> 4442

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 cagatgattc agatggtatg gacgacgatg ctatgttccg tattgaccc tttattgoga 120  
 ggattttcaa ggagcgcaac aaccttcctg gtagtgaaac tcagcaatct caacttatgc 180  
 gatttaagct tcgtgtgctt actttactgg agttatatct tcagaggaat ccaggaaaaa 240  
 aactggtgct ggaggtatat gctttcttaa tgcaagcttt tgtgaaatca catagcgccg 300  
 atggcaatga gcagttcagg caacgtattg gtggtatatt gcagaaaagg atattcaaag 360  
 caaaagaatg tccaaaaggc tttgatgttg aactcagtag acttgaaagt ttgctgcaga 420  
 aggctctgca tctggcatca 440

<210> 4443

<211> 381  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-058-Q1-E1-E1  
  
 <400> 4443

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 tccgccgccc tcatcaacca gaaatgccac gtcaagaaca aggatatcag gaagttcttg 120  
 gacggtatct acgtcagcga caagggcgcc atcaaggagg agtagagtgc gaaaaaccgt 180  
 cccaccagaa gccgtgtttc tgcctgccgt gtttcacgtg ctttgtgtcg tcgttggtcg 240  
 gattttgaac tttctctagg ctgaattttg tagtgggggt aattattang gatgtgccat 300  
 ggaacatgtt atctttatta tctgtattg tcgccgcgag aatgggtccg acgcttatct 360  
 acccctataa aggctgaaga c 381

<210> 4444  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-E10  
  
 <400> 4444

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 tctatctcaa agacgccagt agtagctact aggtcggcgc tattgcatat tctgcaaaaa 120  
 tgtatctcgg ctaccaattt gttggcacga ctcatcttagc tattttcgac aaatgaattg 180  
 gataaaatac tgagcatctc agcccgggtgc caatcaacat cctctgtcca tcatgggaca 240  
 gatatctaac agtttggttag ccagagttag caggcacttg atttttggtt tgacgtcgat 300  
 gatcgtgtcc gcttcttgcc tgtttgccct catgtccgcc agtacgtggt gtatattccg 360  
 cctagctga 369

<210> 4445  
 <211> 306  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-E11

<400> 4445

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 caacatgaag tacgtcccag agccgaatgt gagtcctaata gccaggctaa ctttgttttt 120  
 cgaggggtgtt ctagggggccc ctggcgggga tccgatccaa caggggtggc tctctggccc 180  
 aagaggtccg gccgcattgc cggcgtgtga agaccatggc cctcatggaa ctggtgttcc 240  
 ccagatttta cgtcttggtc acatcttagt tggatggtgg agggtagggg gtaacccccg 300  
 tggcgc 306

<210> 4446

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E12

<400> 4446

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 cttggaggac gataactata tgcctacctc cgaagatgag gcgagcctcg gtgatgacaa 120  
 attcggcgta ccagaggatc ccatagagca ggatcgcttt aagcgcaggc ttatagccac 180  
 tacaagaagc ctgaaaaaga agcagcagca gctccaagcg gaccaagatc tgcttgacga 240  
 cagatggacc gaagtccttg cggccgaaga atatggactc gaagcccaa gcaggggata 300  
 cccaaagcat aaaccgctag aagaagaggc cgaagagctt gaacttccag cacaagatga 360  
 ggctgaccga ccaccacgtg gccgggatga aacggcatgt caggccggac accagcccgc 420  
 acccccacgc cggttcacca tggcctgcgg caatacgcaa ga 462

<210> 4447

<211> 419

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-058-Q1-E1-E2

<400> 4447

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tactattaac tatgctctta gggcatcttc aatggctata agatagttgt tgggccacat 120  
 aggatthttga tgatgtgtca taaaataaat gaggaagag agtaagattg tatgtacatg 180  
 aaccaacacc ctgtgcacaa gcttcaatgt agaataagag agcaccttat ttattatttc 240  
 acatcttatt ggacacacta gatacaatct attggagtag ttttatgtta aggcgttggt 300  
 tgatgacatg ccatatttta cgaacaagct aacaaacaaa ctgttgagaga tgctcttaag 360  
 cagtttcatg tactcgggac tagcanacat gctgatgtgg cagacaaaaa gaagagaga 419

<210> 4448  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E3

<400> 4448

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 ggctcgccag acacctcggc caagaaaagc caagaacaat ggccgcacta acaagcctca 120  
 tgaccgcgtt ttatgcaggg gaagacagtt ggttggaaca gtgcagcccc agcgacccaa 180  
 gtacatccga aactaaggat ggaaacggaa aaccgcgacg caacaaggac catcgctgga 240  
 ctaaggacaa aagtccgaag agcacggcag tcaatgccgg attcaaaggc tcacgacaaa 300  
 atcaagaaaa attgccgccc aggataacag ggacgatcca tccaacctaa ataaaatcct 360  
 ggacaagata tgtcagatac acagtac 387

<210> 4449  
 <211> 261  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E5

<400> 4449

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 acacctcgag cttaacatgg cgtgaacaat tgtctcgata gatttgctcg tcaactcgctt 120  
 ttatgcacgg gaggtcagtt ggttcgcagg gtgcagcccc agcgacccaa ctgtattcgg 180  
 aaactacgga tggaaccgtg aagccgcgac tccactagga gcatcgctgg actaaggcct 240

agattccgat cagctatggg a

261

<210> 4450

<211> 316

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E6

<400> 4450

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gtcaaaaggt ggcggggccg cccatggaaa gcctgttaac gacctgttcg tatatagccc 120

atttacagcc cgctaacca agggccgtta caccctatcc gaattaggcc cagtagcgtc 180

atctggggcca tccaatatga ttccagccta atttcacttc cgccccatt tagggccaag 240

aagttcttcc ggccaatata agggccaagg tactccttgg ccaataaccg gcccttgta 300

aacctggccg gtatta 316

<210> 4451

<211> 185

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E7

<400> 4451

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gtcccacggt ggcggggccg cccatggaat gcctgtgatc gacctgttcg tatctgcct 120

atttgcagcc cgcgaccct cggtctgtta gaccctctcc gagttaggcc ctgtatcgtc 180

ctcta 185

<210> 4452

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-E9

<400> 4452

gggtcgaggc gccgaacac gctgaacaac aggtgatcgc gcgagaagct cttcctccgt 60

aattaagtag cggccaagcg aagaccgggg cagagctgca aatgcaagaa gcaaggagga 120  
gcagagcaga cactccggcg ccggtggtga gctgctgctg aaccggagcg ccagtcagaa 180  
tttcccgctc ccgagctggt ccttctgccc ggtgcccac cagcatcctct gtccatcatg 240  
ggacagatat ctatcagttt gttagccata gttagcaagc acttgatttt tggtttgatg 300  
tcgatgatct tgtccgcttc ctgcctgttt gcgctcttgt ccgcgagtac ttggtgtata 360  
ttccgcctag ctgatgtect tttgttctac catcagaaac aagaattggt ctcttgct 418

<210> 4453  
<211> 378  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-F10  
<400> 4453

ataagtattg tatgtgaaac caaaattgag gatctcttga aaggtggctc gtgacatgat 60  
acgaagccag gcgtgaggaa taacctcaga aacagggggg aaaggagagt caggtttcga 120  
tctcgtggaa ctgtgggtta tgggcccacc atgtgggtta aaagtaggaa ggggtgctggc 180  
atcttgcacg gttatgatag caaggtatgt tagaggatag tatgtcagtt atgtcggcaa 240  
caacgttggg accaagggcg agggatgaag agaaccattt tctgctcgt tgaacgaggc 300  
tgaccaatag gcacagttct catccatcgg tggtaccgg aatgtcaaca ccaatagtag 360  
caggggtcttt actgacag 378

<210> 4454  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-F12  
<400> 4454

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tcaatctgac ctgctcaaaa ctgagaattt gaagatTTTT tccctttata tgtatatcac 120  
ctgtagcccc caagtgtcgg gttgtcatgc tagcagcaac ctgggatttg taattgcctt 180  
atgtcataa aacttcaacc agtgtagccc ccaagggccg gtttagtaag atattactga 240

gctgggactt tgtatataat tcattgataa taatatcata tgatgtaata tccaccatgg 300  
 ggcttgaacc cacgtccaaa aggttaagag ctttgtgctt tacaaactga gcaatggggtc 360  
 cttcaatata atggattaag acttgtgtac cttgaactgt tg 402

<210> 4455  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-058-Q1-E1-F2  
 <400> 4455

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 ggtagagcac tgctattaag cgattttgga gaagacagat gaattcgagt tcctttcaga 120  
 tctagtccat agatttgcac cgctgacttt gagtgtgggg gacgaacttc ttgacaagga 180  
 ggcttccggg ggatctgtcg gattaagccg gtgggtgcac cgatgacagg gatgtgagcg 240  
 ccgcggtagc cgtgaggcct atggacctga acgacaatgg tacttgogag actgcctttg 300  
 cggcggactc gggtcagttg gtgctgagag atgatccaca aacgcctggc tggacaaaag 360  
 acgttcaacg atttagctgc tactcagtcg tctaattatt gtgtgttgge cttttagtgc 420  
 tgtggcaagt ctgt 434

<210> 4456  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-058-Q1-E1-F3  
 <400> 4456

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 aatgctctgc atggagctac tctagctaatt ttctcccact ttcagtatgt atccagattg 120  
 agacttagag tcactctggat cagtgtaaaa gtttgcaccg atgtaacttt tacaacgaaa 180  
 tcttttatca cctccataat cgagaaacat ctccttagtc ctcactaagg atattcttga 240  
 ctgctgtcca gtgatctact attagattaa aattgtattc ctttgccaaa ctcagaggaa 300  
 ggtataaaat atgtctggtt cacagcatag catactttat agaacctatg actgaggcat 360



aggggaatgac ttttcattct ctttctatct tctgccatgg tcgggtcttg agtcttactc 420  
aact 424

<210> 4457  
<211> 358  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-058-Q1-E1-F7  
  
<400> 4457

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ctggtttaac agatgacagt gtacaacgga cggatcttat tgcgctggtg cagatcttac 180  
tcatgcaata tcgccagttt tggacgtggt gtttctgtag gggttccaag ttgactcaag 240  
agacgaggcc cgtgttgtgt cggttgttgc gtaggaggac aaattgaagg gtcctccgta 300  
tattggtata cttcactaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagcg gccgctct 358

<210> 4458  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-058-Q1-E1-F9  
  
<400> 4458

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caccgccgaca tcggcatctc ctcaaaggcc atgtccatca tgaactcctt catcaacgac 120  
atcttcgaga agctcgccgg ggaggccgcc aagctcgccc gctacaacaa gaagcccacg 180  
atcacctccc gcgagatcca gacctccgtc cgcctcgtec tccccggaga gctcgccaag 240  
cacgccgtct ctgagggcac caaggccgtc accaagttca cctcctctta gattcagttc 300  
ctggcagctg tagttgggtg ctgtttgccc agaattagtg ttgctcagtg gaaatcggtg 360  
gaatatcggt tagtttgtag ttgggttggg gatgttaccg tgcctatgga ctgatcgatc 420  
tgaaatagca atggtctggt gc 442

<210> 4459

<211> 399  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB103-058-Q1-E1-G1  
 <400> 4459  
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 cttcctcaaa acagccacca tacctaccta ttatggcatt tccatagcca tcccgacata 180  
 tattgccatg caactttcca ttgttccggt attatgacac gctccattat tgtcatattg 240  
 ctctttgcat gatcatgtag ttgacattgt atttgtggca aggccaccct cataattttc 300  
 ataaatgtca ctcttgagtc attgcatatc ccggtacacc gccggaggca ttcatataga 360  
 gtcatatattt gttccaagtg ttgagttgta attcctgag 399

<210> 4460  
 <211> 376  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB103-058-Q1-E1-G12  
 <400> 4460  
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 tacatatgca tgggtgtatg tgtaaagggc catatcagtg gactgaactg cagaatgcc 180  
 gaataagagg gggatagcta gtcttgctga agactacgct tctggccatc tccatcttgc 240  
 agcatgtaga agagagtaga ttgaagtcct ccaagtagca tcgcatagca taatcctacc 300  
 cggcgatccc ctctctgctg ccctgttaga gagcgatcac cgggttatat ctggcacttg 360  
 gaagggtgta ttttat 376

<210> 4461  
 <211> 421  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB103-058-Q1-E1-G2

<400> 4461

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atgcatcgct gctgctattc atgtcactgg aaagctgaaa actgccaaagt ttgattgttc 180

tcaccgtggg aaggctagca ggacaaatat attgcatcat gtgaagaagc aaacaaagca 240

gcaacaaggt tctacaagcc cgggtgtatag gcagatgatg gcgatggctg tgaagacgat 300

caggctcagc catccgccat gaacatatgc ccaagaacaa acaacaatt aatcaagtga 360

atgcatcaaa atgtgtagat acagggtgaca agtgcttgaa ctactagcta gcattgggct 420

g 421

<210> 4462

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-G3

<400> 4462

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ctgctgggac cggcttcatg gacgagggtt atggcgaggt ggacgagggt gacggcgagg 180

tagatgaggt tgacgacgga cagggccagc tccggctcgc cgacatgggt gaaggggtgcg 240

gccatagaag agcagatcga aaaaaattg agccttctcc tcacccgagg aaacaatgcg 300

acaaaggagg gtgaatcaac gcggccgagg cgtggggcgg gggagctccg acgaagcccc 360

gggaagctgc acgagtgagt cgagcagggg agctccggcg 400

<210> 4463

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-G4

<400> 4463

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 ccgcctcaac gccaccgaac tcagcgacgt cacccttaac accggctccg tcatccatat 180  
 cccgctccgc caaggcactc agctcgacat cgaggccact ttccaccttg atgcttctgc 240  
 cgtcgctgcc ctcaatgagg ccgatgtggg ctacaactgc agcagcagcg gcggtgctgt 300  
 taaccgcggc gcgctaggcc ccttcggcct cctcgtcctc gctgccggtg accgccgtgg 360  
 cgagcaaacg gcggtgtact tctacg 386

<210> 4464  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-G9

<400> 4464

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 gaagacttat gttttcgtag tttcattttc tctttcttga gtcataaggaa acaccgtact 180  
 gttaaagggg gtcgaggaaa tactaaggaa aaatttccat gttatgctca actcaaaatc 240  
 ctacacctac caatcccttc gagtgaagcc attggaaatc tcatacagtc cagtcatatt 300  
 cttcagtgc agagacgaag ttcttctggt ctctgaggaa tttgttctga ctgaggagtt 360  
 aggaattcgc cagtgtggat tgcctacaca gtgaaggaca tgatagccct gaggaatttg 420  
 atactc 426

<210> 4465  
 <211> 367  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-H1

<400> 4465

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 gagtactcgc agctaaaaca tcttcaagaa gctatgctaa acttgaagtt ttctcttgta 120  
 aaatggaagt cactgtcgct tgatctcatc tcccgtactg gctacattac cgtgacatgc 180

cgtgtcctag catatgaatg tggctttggt ttggctctag gtgccggaag tagttatatt 240  
 atctatgcat gtatgtacgg ttcgtaccat gtgttatctg gtggtactgt agattaaact 300  
 ggggtgggtgg taataggaca tatcattcga cttgtcataa ctactaagtt agacatatac 360  
 ttcaaaa 367

<210> 4466  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-H10  
  
 <400> 4466

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 aatgatatgc agagactgat ggccgatgag caagaagagc gcatacgaaa gaagggtggag 120  
 aaggcaatgg ccactttgca agtctccatg aacagtattt atgacatcaa tgtaccatcg 180  
 aagatatccc tggacgatcc agatgatgaa acaacattgg agcttgatcc tgagttcctt 240  
 cctccaacgg cgtacttaag ctcaagacta ggtgagcatg atggcaacta tctcctttct 300  
 gatttggaat ttgagcatga ccctttttct ggttgcaatt ttgacctgaa gctcaaggat 360  
 gactactgaa atgatagttt gtctagatca acagtattac tctgttgagg tttcatcggt 420  
 cagtgactca gtg 433

<210> 4467  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-058-Q1-E1-H11  
  
 <400> 4467

gggtcgaggc ggggaatacaa tagatattac accaatatga atttataatg agttcacaac 60  
 agtacctaag tgggtggtttt attttcttat actaacggag cttacgagtt ttctgttgag 120  
 ttttgtgttg tgaagttttc aagttttggg taaagattcg atggactatg gaataaggag 180  
 tggcaagagc ctaagcttgg ggatgaccaa ggcaccccaa ggtaatatta aaggacaacc 240  
 aagagcctaa gcttggggat agccccgaa ggcacccctt gtttcgtctt cattcatcgg 300

taactttact tggagctata tttttattca ccacgtgata tgtgttttgc ttggagcatc 360  
 attttatttt cttttgtttt gcttgctgtt tgaataaaat accaagatct gaaa 414

<210> 4468  
 <211> 256  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-058-Q1-E1-H12

<400> 4468

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 tggggccatgc anaattcaca cgatatggga taccatacca acacacagcc ttagaggatg 120  
 ttggatactt cggcaggtgg ccaagacggc gaggatctcc tcattaacaa taccgaggag 180  
 catcatcccg cagaaacgac aatacagtgt tgacagtctt cgagactttc acctcaaata 240  
 acaggcgcaa gagagc 256

<210> 4469  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-H2

<400> 4469

aagaagggca gcaaggccaa gaagggcgtg gagacgtaca agatctacat cttcaagggtg 60  
 ctgaagcagg tgcacccgga cgtcggcatc tctccaagg ccatgtccat catgaactcc 120  
 ttcataacg acatcttcga gaagctcgtc ggcgagtccg ccaagctggc ccgctacaac 180  
 aagaagccca ccatcacgtc ccgggagatc cagacctccg tccgcctcgt cctccccggg 240  
 gagctcgcca agcacgcggt ctccgagggc accaaggccg tcaccaagtt cacctcatcc 300  
 tagacagctt aggcttgatc ctcgctcgtc catgccttct gtgtgtacct agtcggcagt 360  
 atgatgttac aatctttgta aggattctgc tgcttg 396

<210> 4470  
 <211> 284  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-H3

<400> 4470

ggtggcgtgg aggtttttctc ggtgtgggtc ttcgctgggc cggggcaggt gcacccgcgt 60  
ggtccggatc ttctcaaccg agctgtatgt cttcggctcc ttcaatgtgg aggtcatcgt 120  
gaatgtcgtc gggaatctta tcgtgctagg tgtcatggct tgggcggcca acatcgagtc 180  
ttgggagatt cagatcttcg tgtttcgctt gctctttcgt gagctggcca ggccaccttt 240  
ctgcttttgg accactgtcg tctccaactt caatgcagcc ttg 284

<210> 4471

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-H4

<400> 4471

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gtgcttcatt taaacctttg gaccttgaaa gttttggccc aatggcttca cttaaacctt 120  
taaaaccacg gcggtggctt aatttggtaa aaattgcaag cccccaggc ttcacttaaa 180  
taattttgaa agcctttttg aacagcatgg tatttgcaat ggtataaaa gtgggtccaag 240  
aatggtaggc atccaagttg ggtataataa aaactatcgt aggaagtga ttggatgcta 300  
tgatcaattt gatacttgat aattgttttg agatatggag gtagtgatat taaagtcattg 360  
ctagttgggt gattatgaat ttaaagaat 389

<210> 4472

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-058-Q1-E1-H6

<400> 4472

gtaaaaacaa ttgtcagcat acttaaccag agcttccatc ggctccccca tgtcactgaa 60  
gtggcggttg agccgccta gcttctgctt aaggggcaaa aaatgacaat tcttctctaa 120  
catcaagact actgagccga cattgatacg atccggtgag tgcaggatag ttgagacgcg 180

gcgacaccaa tgggttggtg actcgccctc ttcttgga caagagtcca aatccacaat 240  
cgacatagga tgtttgcatg tatctttaa ttctggataa accgggcttt taacttggcc 300  
catgatccaa tggagttggc aggcagccct tttaaccaag tacgggtcgt cccatccagc 360  
atcatggtga aatatttggc acacgcagca ttgctaacat ccaacagctc catg 414

<210> 4473  
<211> 350  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-058-Q1-E1-H9  
<400> 4473

acattcacca tgaatcatca tcgccccat gcgtcggtga cttatggcca tgagaagaag 60  
ggaatgctgt gtgggtagta gggagtatgt tgggtatttg tttgtttact gtaaagagga 120  
acacttcctt taatagccat tgttatgtgg taggtgggtt agtggtgcaa ccagaggatg 180  
catgtgttct catgtggaag ggacagtgat aatggaaatg agctgggtgt tagttaataa 240  
tcagttagta aaaaaaaca taaaataaaa aaataaagt caaagtctag ctaaagatca 300  
tggacattat ggaaaatctt aaagacaaag ggaaaaaaa gtgcccagag 350

<210> 4474  
<211> 77  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-059-Q1-E1-A1  
<400> 4474

cgggatatta caagaccaga tggcatggt cccaatagtg gtcctgtcga cgacgaagag 60  
cagacggcct ctctgat 77

<210> 4475  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-059-Q1-E1-A11



<400> 4475

tcgacgggga tggatatctac aagggttttg atctgaagaa ctattccttt ctatattcaa 60  
tacctgatac caatgtgcag gagataaaga ttagtccagg aattatgctc ttaatatatg 120  
atcgaacgcc aagttatgtt cctttgagga tattatctat tgaagatgga aagccactca 180  
aattattcaa gcacttggtg caccgcggca agaaaattga ttttatcgag caattcaatg 240  
agaagctcct tgtgaagcaa gaagacgaga accttcagat acttgatgta cgaagtctcg 300  
agctaattga catcagtatt gagaagtttt atgacccgctc agcattaatt tttctgtatg 360  
agaacaatct cttcttgaca ttccganaca gaacagttgc tg 402

<210> 4476

<211> 376

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-A2

<400> 4476

ccggtcaaga atatccgggt cgactggatg ctataatgaa gccgtttatg ctccgccgtg 60  
ttaagattga tgtcatagca gaaatgacgg aaaagaaaga agaaattgtg ccctgcagat 120  
tgagttctcg ccagcaaato ttctatcaag ccataaagaa taagatctct cttaatgagt 180  
tgcttgatgg aagtcgtggc aatctaaatg ataagaagct gcttagcctg atgaatattg 240  
tcatgcagct acgtaaggtc tgcaatcatc cagagctgtt cgagcgcaat gacggaagct 300  
attactttta ttttgaggaa atcccaaatt ctcttcatcc tccccattt ggggagttgc 360  
aagataaaca ttatgc 376

<210> 4477

<211> 332

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-A3

<400> 4477

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gagggatcaa gagacgcaat tgtggcctgc agattgagtt ctgccagga attcgtctag 120

gagggccata cggatatgat ctctcttgat gggttgcttg atggtagtgc tgggaatcga 180  
 agtgatgaga agctgcttag cctgatgaag attgtcatgc agctacgtaa ggtctggaat 240  
 catccagagc tgttcgagcg cattgaggga agctattact tttatittgc ggaggtccca 300  
 tgttcgcctc ttcttctccc atttggggag tt 332

<210> 4478  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-059-Q1-E1-A4  
 <400> 4478

acggtcaaga catcccgggc cgaccgggtt gtcaaatacc tcgatggcaa gcacggcctt 60  
 gcccttgccg tttatgttgc ggcgccggca cttcttcttc ggggcgggtg tgtcttcgtc 120  
 tgtggagtgc gtttccgcac cagcgtcctc actgggggtac ttctccccct cctcagctcg 180  
 agcgcaccta tcggccagaa cataaagctc ggccacatct ttgaccttgt tcatcgtcgg 240  
 ctttcacgca tcttacgggt gcacacattc tgatagaatg cgctgatcac ggtggcggga 300  
 tgaacatctc ggacgttgta ctacaccgg ctgaacctct gtatgtacct gcgccgggtt 360  
 tcaccttctt tctggangat gatattgaaa t 391

<210> 4479  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-A7  
 <400> 4479

cgggaaacac cagacttttg gtggtacctc taattgccat aacttgttcc aagcatttag 60  
 ataaccattg cccaaaccag ttgcttcagt caacagtttg tatgctgagt gaactgaaaa 120  
 tagacctcgg ttatttggct gccatgccca aaaatcttcc cccacactaa ttgggattcg 180  
 tacaattgcc tccgcacaa tacctatgaa gtttgcttcc accttttgca catccattc 240  
 ttcataattc tcaacaagta gttcagaagc atgattggca gtagcataca tgggctttaa 300  
 catagccttg taagaattat tggaagggat tcatggattc tcccacacat ttatagtatc 360

cccatcgccc atccttttga taagaccaat tt

392

<210> 4480

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-A9

<400> 4480

tctggcaacg gtagaggcgc cgacatcaac ctcaaggtca aggggcagga tggcaatgag 60

gttttcttcc gcatcaagag atccacacag ctgaagaagc tgatgaacgc ttactgcgac 120

cgtcagtctg tggatctcaa ctccattgct ttcctttttg atgggtcgtag gctccgtggt 180

gggcagaccc ctgatgagct tgagatggag gaaggcgacg agatcgacgc catgcttcac 240

cagaccggag ggtgctttcc tggcccttag aacgagcttg ctgcagcctg gctgttctat 300

gtcgtatgct accttttagaa ctagagtaaa atgtaagaag tgaaagaact tgtgaggcta 360

tggttctgtg ccatagcctg aaggggggtc tggaggtgaa acaacatcgg agtactgttg 420

atgtcgtgac tga 433

<210> 4481

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-B11

<400> 4481

ccgggcccgc ggggacacca acttgccgtc cgagaaggtc aaggatgaga tcgtcctcga 60

cggcaacgac atcgagctcg tctcccgtc cgccgccctc atcaaccaga aatgccacgt 120

caagaacaag gatatcagga agttcttgga cggatatctac gtcagcgaca agggcgccat 180

caaggaggag tagagtgcga aaaccgtccc agaagccgtg tttctgcctg ccgtgtttca 240

tcgtctttgt gtcgtggttg tgattttgaa ctttctctag actgaatttt gtagtggagt 300

taattaggga tgcgctatgc aacatgttat ctttattatc ctacatattg tcaccgtgaa 360

aaaaaaacaa aaaacagaaa aacaaaaata ggctacaaaa aaataaaaaa aaagcggccg 420

ctct 424

<210> 4482  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-059-Q1-E1-B2  
  
 <400> 4482

cgggtcaagaa tatccggggtc gacgggggatc ttgaaataca gtaggttttaa caccaatata 60  
 aataaagaat gagttcatta cagtacctta tgtgggtggtt ttgctttctt tcactaacgg 120  
 agcttatgag atttcttggtt gagttttgtg ttgtgaagtt ttcaagtttg gggtaaagat 180  
 ttgatggact atggaataag gagggacaag agcctaagct tggggatgcc catggcaccc 240  
 caagatattc aagaatagcc aaaagcctaa gcttggggat tgccccggaa ggcattcccct 300  
 cttttgtctt tgttcattgg taactttatt tggagctata tttttatttg ccacatgata 360  
 tgtgttttgc ttgtagcatc ttgtatgaca ttagtatttg ctttttagtt taccacaatc 420  
 atgcttgctg tacacaaca 439

<210> 4483  
 <211> 201  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-059-Q1-E1-B3  
  
 <400> 4483

cctgagaacg gaagggggcg tgtcgattgc gtctctcac gggatgaacc taaacacgaa 60  
 agcaggggtc tggaagtcaa cgaacttgta agatccttcg agtgagttca gatagattgc 120  
 ttcgcggggc tcttcgctca cgccgctctg catggcatac tccagtgcc tttcatagtc 180  
 aacctgttca acatgctgcg t 201

<210> 4484  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-059-Q1-E1-B4  
  
 <400> 4484

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 aaggaaaaga ctgttaagtg ggcgcacaaa atgaggagcc caaaaaacat agttatccaa 120  
 ctataaggac gcctcgattt tcggacggtc actaagacaa agatccgttg agatacattg 180  
 gaagaaccgc gtatttatag caggtgacat catggcgggt tagcacaaat tcaagggatg 240  
 atgtcatggc aggttacaaa aagcttcata agcaaggagc agaagatttt tcttaaagta 300  
 tcgaagattg acatgaacca gttcaaatca atctggggcc taatgttggg gatataacta 360  
 taaggatatga cctccctgg aggggccggg ttatatctat gagtattctg aagcccaaga 420  
 cc 422

<210> 4485  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-B7  
 <400> 4485

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 ctgcatcagc tgtaacgtta ttctgcttgc gaattttctt agatcatcaa tcaggagacc 120  
 ggagcttgaa tgaaacctga gtaggcttgc gaattttgta tgcttgcaac atcatttggt 180  
 catgaattat atccctggtg tagaagttaa gttgctgcaa tggttgacat tcgattaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacgggcccc 360  
 ccaaagggtt caag 374

<210> 4486  
 <211> 361  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-B9  
 <400> 4486

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 tacttgaaca tatggtgcag gccctccata accaatataa acatcaatat aaacatcagc 120

cccccttaggc tcatcaatca gcagttttgt acttatagca tactaaataa aatgctcttg 180  
 tatacaattc tgatctatcc gtaaaaatgc tgacatgtca aatatgtttg ttacttttgc 240  
 agtttgtag agaagcaatt tcttcgatga tgctggagac tcggctaattg cagttttgtg 300  
 ctggttgcat gaatgtacag tcgtcgcgct ctcagtctcg gtgtatcggg atttttaacc 360  
 t 361

<210> 4487  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-059-Q1-E1-C3

<400> 4487  
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 ttgtcctggc tggaagtatg taccaagtat agctatcgaa ggccattcta ttttgctttg 180  
 taaccgggtc aatcgtttat atacatatat atactactca aaaataattg cataacgatg 240  
 gttgttcggt tggtattatt ccataatata caggccgaat catggctgac acggacagca 300  
 agaagatcga tctaccatac tatgcgttga aatatctcct gacgattgta tgtatcgcgc 360  
 tgggttgcttc cattgtttgg taactgacgt ctactanccc actatggatg actgcaag 418

<210> 4488  
 <211> 236  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-C4

<400> 4488  
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 tcagcctgag atgtatgaac gcgaccacat tggcaccatg cttcaacaca ccggagaggg 120  
 gcgtaccact cgcttacgaa gggtcatgct gcacctgac tgtcctaagt cctatgccac 180  
 ccttacacat acagtgccat atggcacgtg acagacccta cgacgctcac actctg 236

<210> 4489  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-C5

<400> 4489

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 ccttcacact cagggtcagg gttcaaccgt tccatgtgct ccgtatcaac aagatgcttt 180  
 cgtgtgccgg ggctgatagg ctccagactg gtatgagggg tgcttttggg aagccgcagg 240  
 gagtctgtgc ccgtgttgcc attgggcagg tctctctttc tgtgcggtgc aagcccaaca 300  
 atgccatcca tgccactgag gcccttcgtc gtgccaagtt caagtccct ggccgcaaaa 360  
 agatcattga gagcaggaag ttgggct 387

<210> 4490  
 <211> 80  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-C6

<400> 4490

gacgggttaa cgaagggtgtg tccagattgt ctcatgggac agggagaagg tgtcgagtca 60  
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<210> 4491  
 <211> 225  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-059-Q1-E1-D1

<400> 4491

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 acgcgtcctc cgaattgatc aatactactg gcgagtggct gttgtcgttg ttgttgtaac 120  
 ctgtaagtcc accattatga agctttcgct tgttttacgt gtctgccttg tctatatgtg 180

taaggctaca angaacgaaa tcaatgtaca tatgttacct ctatg

225

<210> 4492  
<211> 370  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-059-Q1-E1-D2  
  
<400> 4492

ggatttggat ttatgcagta ctttgatccc aacgatgcgg cagacgcaaa atactacatg 60  
gatggacagg tcattcttgg tagagaagtt gcagttgttt ttgcacagga gaacagacag 120  
aagcctgctg agatgggaac tagagaaagt atcagaggtc ggtcttacga tcggcggcac 180  
tctccttccc caagggggcg gccatcttac cgcggccgaa gctactcagg gtctccatca 240  
cctcgccccg caaggcggag gttcagagac gagtctccct cgcgctcccg ctgccccagc 300  
ggatcgagga gtgcgagtcc attggatggg aagtacggca ggtcctcacg aagagagagg 360  
tcgatttcgg 370

<210> 4493  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-059-Q1-E1-D4  
  
<400> 4493

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aactcattag tcacattgct tgcaaggctt atagtgatgt gcattaccga gagggcccag 120  
agatacctcc ccgatagacg gagtgacaaa tcctaattctc gatctatgcc aactcaacaa 180  
acaccattgg atacacctgt agagcatatt tataatcacc cagttatggt gtgacgtttg 240  
atagcacaca aggtgttctt ccggtattcg ggagttgcat aatctcatag tcagaggaac 300  
atgtataagt catgaagaaa gtagtagcaa taaaactgaa cgatcattat gctaagctaa 360  
tggatgggtc ttgtccatca catcattatc taatgatgtg atcc 404

<210> 4494  
<211> 383



<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-D5  
 <400> 4494

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 aatggccgtg tgggtgccac tgctgctgtg tactctgcag caatccttga gtaccttact 120  
 gccgaggtcc ttgagctggc cggcaacgct agcaaggatc tcaaggtgaa gcgtatcacc 180  
 cctcgccacc tgcagcttgc gatccgtgga gatgaggagc tggacaccct catcaagggc 240  
 accatcgctg gtggtggtgt catccctcac atccacaagt cactcatcaa caagacctcc 300  
 aaggagttaa tgatatgaa taacgggtag ttgttggtgt ttgtatcccc gtgatccctt 360  
 gttacgttgt gctacctgtt acg 383

<210> 4495  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-D7  
 <400> 4495

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 gtcggcgctt gtcgttgggt cgccgtacat ggatgcgaca aagtgggtggg atgcagacta 120  
 gcggagaaaa gattccggcg caccctacc tgggtgcgcca aatgtcggat atcgggttcc 180  
 tgcaaaacc ttaaggttca aactctgggg tgcgcgcgaa gatcttctcc ctactgatcc 240  
 acgcccacaa cctcgccgcg attctaagct aacaagatga acaacacaag gaacacgaga 300  
 ttatatactg tttaggccac cattgtggtg taatacccta ctccagtgtg tgggtgtgtg 360  
 attaactctt gggctgatga ggaacagtac aagggaaga acagcct 407

<210> 4496  
 <211> 221  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-E1  
 <400> 4496

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 gtttgtatca agtttttgtg gcacttgcta ccttgatttc aatggagata acggtgtagc 120  
 acaaattcaa agcatctgta tatgtatgct atgcattctt atgcccttca tgcgggatgg 180  
 atatttttga aatcaacaaa agagacagat atattatgtg t 221

<210> 4497  
 <211> 328  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-E2  
 <400> 4497

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 attagtcca gtgtttgatt ttgttctgtt tgtcatggta cgaggaaaga tcaccaagta 180  
 gataaggtct ctagtagcag ttggctgta cctaatacgt acccttattt cattccgact 240  
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 aaaagaaaaa aaaagaaat tttattat 328

<210> 4498  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-F3  
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 tagcaaagat gtcacaaac cgcaggacga tcgtaccccc gatgtcgcca tccacaaagc 180  
 ccttgtcttc tggcaccttg gccacgaaaa ccgggtatgc cacatccttc tctctgagac 240  
 gccgcttctc caaagaaaga aactgtcgt gcagactccg catagcaccg gttgcagcat 300  
 tgagcatatt tgggtgtagc atcgccctac ccgccacatg caccctcctc gagatatact 360  
 gcggtgaagg tgaccggtca tgagcacgga tcgtactcgg tgccggctgg ctcgcaacct 420

tcttagtctt toctttgcgt gt

442

<210> 4499

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-F4

<400> 4499

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tagttgagta gttgtgaatt tgagaaatac ttgtgttgaa gtttgtgatt cccgtagcat 180

gcacgtatgg tgaaccgtta tgtgacgtag tcggagcatg atttatttat tgattgtcct 240

ccttatgagt ggcggtcggg gatgagcgat ggtcttttcc taccaatcta tccccctagg 300

agcatgcacg taatactttg ctttgataac ttgtagattt ttgcaataag tatatgagtt 360

ctttatgact aatgttaagt ccatggatta tacgactct cacccttcca cctttg 416

<210> 4500

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-059-Q1-E1-G2

<400> 4500

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atagtccggc gccgccggga ttggcatgag tgtgagagat cggaggtgct caaagacctg 180

tcatacggga tcagttcgcc gcatcttgaa atagttttgg aatgactttt ggtaaaagtc 240

tgctgtgccg gtagaccttc cgtttgtagg gctttagct gtatgccagg gcctaattgat 300

tatgttatgc tggctctaaa tatagaacaa catgtgtttg tacgtggtat cttgtacctt 360

acttttgctt gatta 375

<210> 4501

<211> 384

<212> DNA  
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 gttttgccct agtgcttcac ttaaactctt ttagagcaca ttggtgggtt aattttataa 180  
 aaaaatattg atccctcatg cttcacttat attattttga aagtctttta gaacatcagg 240  
 gtaatttgct ttggttggtga aattagtctt aatatgatag gcatccagga tgggtataat 300  
 aaaaactttc atatacgggtg cattgaatac tatgagaagt ttgattcctt atgattggtt 360  
 tgagatacta atatgatgat atta 384

<210> 4502  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-G5  
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 acgggttcaga gaacattgat caattgttgc gtcactgggg tgccccctg cctcgtata 180  
 taaatgacca tgggggacgc cgccggttca cgaggagggc gcgccacggg ggaactccta 240  
 ctcatactgc gactaagaat cttccctccc ttgttggcgt atgagacacg gaacgatgcg 300  
 gggaatt 307

<210> 4503  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 4503

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 atctcccgtg aggtccagcg cctagatgct gatatggacc gattcatcag ggcccagagt 180  
 gagcgcatga ggcagtctat attggagaaa gttcaggcaa agcagtttga agcgctggcc 240  
 tctgttgaag acaagatcct ccgaaaaata cgcgataaag agtcagaagt gcagaaacatc 300  
 aacaaaagga acctggaact cgaggaccag attaaacaaa tggcagggga agttgggtgcg 360  
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<210> 4504  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-H10  
 <400> 4504

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 aatgggtgct atcatcggct gtacctaatt gatgttctga tagcccttta gctcgcatag 120  
 aaaatttcac gacgcccttg taatcaaagt tagtatcagt agtatttttc aatcaaacgc 180  
 attaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggcc cccaaagggt tacaagtta 360  
 ttttcgcgga aaagagttgt aaaaccctt caaaggggcc cccaaattta attac 415

<210> 4505  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-059-Q1-E1-H12  
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 tcttctctgg attcttttat gcatgattta aatatctttg caagtctctt cgaattatcg 180

gttttagtttg gcctagtaga ttgatctttc ttgcaatggg agaagtgctt agctttgggt 240  
tcaatcttgc ggtgctcgat cccagtgaca gaaaggggaa cgacatgtat tgtattgttg 300  
ccatcgagga taaaagatgg ggtttatatc atatttcttg agtttatccc tcgacatcat 360  
gtcatcttgc ctaatgtgtt actctgttct tatgaactta atactctaga tgcacctgg 420  
at 422

<210> 4506  
<211> 380  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-059-Q1-E1-H4

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gaacaaatcc tcaatcctgg aacctccaaa gccaaaaatt ctggcaaaag ggtaaattcc 180  
ggctgtccgg aaaccccccta atcaaggact ccctcaccca tagcatgcac ttatggtgaa 240  
ccgttatgtg atgaagtcgg agcatgattt atttattgat cgtcttcctt atgagtggcg 300  
gtcggggacg agcgatggtc ttttctacc aatctatccc cctangagca tgcgtgtagt 360  
actttgtttc gataactaat 380

<210> 4507  
<211> 333  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-059-Q1-E1-H8

<400> 4507  
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tccgcacgtg aaaacgtgat gatttcttct ctctgatttt ttctccctga aactcaatat 180  
atggaagtgg agttggagtc ggagaggcaa cagggggccc acgaggtagg ggcacgccct 240  
aagggggcag gcgcaccccc caccctcgtg gcaaggtggt ggccccctgg ccttcatctt 300

tggcagggtt ttttcttatt ttctgaaaag tgt

333

<210> 4508

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-A10

<400> 4508

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cgcaattcgg gttagcaacc ggagcttcaa tcacctgcac ataaaggcat tatggttatt 120

acctgggaat atgatcctct gtctcgtcgtc gtttccgacg ataaccagag tctcaggggc 180

tactatctac acagggcaca cctagcatgt gcaggactat catatattct ttacgtacc 240

tcaaagcctg tcagtagact cataaaagct tcatgcaatc tgctttcggc ggacgatatt 300

ctctccatca ccgtattcat cagcacacgg tggtcatctg agatggccgc tcgccccacc 360

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<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-A11

<400> 4509

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cgtgggcacc ttcattgagcg tctactacaa gagcaagaag gggcgcaagt ccgagaagga 180

ggtgcaggag gccgaggccg ccattcctga gcctgcctac gccgacgagg cctaggcgtg 240

ttcgtcgtcc atcgccgtcg tgctcgtcgt cgcccgcccg tgtctcgccg gtttcgggtt 300

cggtttcttc ggtcgtcgga actctggatt aattgggtcc cttttgcttg gttgcttatt 360

aataagtaga acttgatcga tcgtgtagcg ttga 394

<210> 4510

<211> 373

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A2  
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 agtctcatca tgggtgctgta taaattcagt ccaccttgtc actgctcatc gatcgacctg 180  
 cttggcgctcg cgggtacagtt agctcaccat ccgttccgta tcagagaatg ctgccatgcg 240  
 tacgttcaca gtgattcctt gccgaacggt tcgattgcta tgcacctcag aactaactct 300  
 gcggttggtta ccctcgacct gtaattagtc cattatatat gtatatgttg catttccaga 360  
 gccaaaatat tgt 373

<210> 4511  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A3  
 <400> 4511  
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 ccgaaaaaac tctcaaaata atataagtga agcatgagag atcaacaatt tctacaaaat 180  
 taagccaccg ccgtgctcta aaagatataa gtgaagcact agagcaaac tatctagctc 240  
 aaaagatata agtgaagcac atagagtatt ctaataaatt ccaatcaagt gggtttctcc 300  
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 acaagattct ccaagcaaaa cacatatcat gtggcgaata aaaa 404

<210> 4512  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A4  
 <400> 4512



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 tgttacgggt gatgccacgt gtcggtcacc cttgaggaaa gcacttttgt gacgcgcgat 180  
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 ctacgacagc acaggtatga ctatcttgat tctgtcataa atttgtaatg gatgtacatg 300  
 catgacaaaa aagcgacctt ctgtgacaaa gacgtatcat cacggaagtg tattttttta 360  
 gtgatatggg ggacaatata gagtacatgt gtctatcacg agattattcc aatgaatat 419

<210> 4513  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A5  
 <400> 4513

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 tcacgtgcac ccggacctag gcatctcttc taacgccatg tccatcatga actccttcat 180  
 caacgacatc ttcgagaagc tcgccgggga gtcggccaag ctggcgccgt acagctagaa 240  
 gccaccatc acgtcccggg agatccagac ctccgtccgc ctgcgtctcc ctgtggagct 300  
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<210> 4514  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A6  
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 tccattgttg ctaccattg acaattatta ttgtctgttg ctccatcact ggaattggtc 180  
 tgggtgatgt gagatttgtt ctatttgctg gaaattcacc ggcagttaa gttatgtgaa 240

gctcaaattg tagatttggg catggaagga tagttgataa gcacaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa agaataaaaa aaaaaaaaaa aaaagaaata aa 342

<210> 4515  
 <211> 473  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A7  
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 atcgtcgcgg agtttagcgg aagccctgcg ccggtagagc atcatcatag tcaccacgcc 180  
 gtcgtgctaa cggaactcat ccccgaaact ttgctggatc ggagcccggg gatagtcac 240  
 gagctgaacg tgtgtgaac tcagaggtgt cgtacgttcg gtacttggat cggtcggatc 300  
 gtgaagacgt acgactacat caaccgcgtt gtcataacgc ttccgcttac ggtctacgat 360  
 ggtacttggg ccacactctc tcctctcggt gctatgccat caccatgatc ttgcgtgtac 420  
 gtaggaaatt ttttgagatt actacgtccc catcaggaat gttcttttcg cat 473

<210> 4516  
 <211> 497  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A8  
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 tgaacattgt atctggatct catttaatac gagatggcta ctcatctaaa tccgagaata 180  
 atggttggtc tatttatatg agagatatgt tttatgggtc tgccccgatg gtcaatgggt 240  
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 gtaaagttga taacgatagt cccacatact tgtggcactg ccgccttggt cacattgggt 360  
 tcaagcgcat gaagaaactc catgctgatg gactttttaga gtctctcgat tatgaatcat 420

ttgacacatg cgaaccatgc ctcatgggca atatgaccaa gactccgttc tccagaacaa 480  
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<210> 4517  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-A9  
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 aggacgagga gattgaggat gacgatgctg aggatggtga ggatcctgtc aaggcgcaat 180  
 cctcatcaaa gaggaagagg tctggtgggg aggatgaaga tgatgacgac ggtgatgatg 240  
 atggtgatga tgatgagaag cctccatcaa agcgatagtc aatttggttcg tgctgatctg 300  
 tgatcttctc tgcttgggcc aagaaggaaa ataatcctca tggagaggat tgttggtaaa 360  
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<210> 4518  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-B1  
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 gtaagtgcct atttggttg tctttggctt gctgcccttc aagctgcagc cgcaatggcc 180  
 cgcagccttg ggcatgatga ctatgctgac aggtgcatgg tgaaatttgc aaaggctaag 240  
 cacgtgtttg aagccaagtt atggaatggg tcatatttca attatgatag tggaacaagt 300  
 tacagtagcc actccatcca ggcagatcaa ttgggcggac aatgggacac tgcacatct 360  
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<210> 4519  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-B11

<400> 4519

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gaaggtggta aacgggtcaaa gaatcaaaca ttatatctta ggtaatccta taaatgttga 180
aaccaatatt attgaaaccg taaccccgag gaatacataa gggacacttt ccagaacggt 240
tcagactccg aaaaggaata agtatgtggt acggtaagta aaccgactcc aaaacaattt 300
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gggaaggaca cgagggcccc acaagggt 388
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 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-B12

<400> 4520

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ttaaattgga acctggggtc ccaagaccaa cccgggaagg aaaccccggg ccggcgggctt 180
aacgggggta acaaaacccc cttcctaacc acctgtcac aaggtcagga taacctttgc 240
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ccaacgaagc gatgggctag ctgatcaaag ccgagcccag tcggagtcgg atcaagagtg 360
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tgtgt 425
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<210> 4521  
 <211> 112  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-B3

<400> 4521

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aaccgttttaa ataagtgtca agttgaaatt caatgatgta tgcaactgaa gg 112

<210> 4522

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-B4

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gggcaccctg aagaaaccag tggacttgtc cggaaccct ggagaaacca gtggacttgc 180  
ccagtggatc cgggagtacc tgtgtgatca ccctatggac tgccaaccaa gatcaaaggg 240  
attcatcaat ttttcatgac tagaagctta cgtgcacagc cacaagctat tatgggctct 300  
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<210> 4523

<211> 367

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-B5

<400> 4523

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gtcttccatg ggatgttgct ctgcggtatt tttgatgagg agatccttgc tgctcttggc 180  
taccgcgagg agtatccaac atgctctaag gctgtgggtt cgtatggtat ccggtattgt 240  
gtgtatcttg catggcctat cgagccatcc ctgtaggacg gttccgtgcc ctgtaatggg 300  
ctttgatttt ttggttactg gatcggggcga aaaacaaggg tgcaaccttt ttgtccggac 360  
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 <211> 211  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-B7  
  
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<210> 4525  
 <211> 209  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-B8  
  
 <400> 4525  
  
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 ccgcttgaaa tcgcgagaa actcgaaccc acccctagtg aaatgtcaag tatttccttt 180  
 ttgcctggag acgctactt gctgttttt 209

<210> 4526  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-B9  
  
 <400> 4526  
  
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 gatattogtc atgactcccc ctggggttgc aaacaatgtt gaagcagaca acaagcaagc 120  
 acgtcaataa gcactggacc tgtagatga gaaggagat atggctttgg ctcatattggc 180  
 ggtttaccaa caagaccgt agcgttatca caaccgtcgg gttaaaacaa taacctttca 240

agaaggtgac ttaatgcccc ggctcatcca ggatcagacc gatatgcaca agttatcccc 300  
accttgggaa gggccctttg tggtcagcaa gaatctgcac aatggatcat actacctcat 360  
tgacattccg agaagactca cgcacttctg agg 393

<210> 4527  
<211> 246  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-060-Q1-E1-C1  
<400> 4527

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cagggcttgt ggagtcgatg agtttgtggc tcagaagctc acaaaatgga atgataacct 120  
catcacttat ttcaatccaa aagtcaattt caaccaaatt ggaaggatgg ccggaatttc 180  
gaaaggtata aggtacaatc caacgggtgcc gaattggaaa aatttggttaa tggcccaaaa 240  
gaaaat 246

<210> 4528  
<211> 409  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-060-Q1-E1-C10  
<400> 4528

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cccccttcac caggtcgtcg gcgctctca cccggtacta caggacctgg taattgcata 120  
ngcgggggtgg tggctctccgc acatgcttgt tgatgtgtgg ttattggtgt gctcttggcc 180  
ggctccagac gaataagatt cttcatccat agcagcacc aacccttgca gttccaatc 240  
cgcgggcggg tctcgtcgtc ctctcccaca tgctgtactg gaggaggcaa atcctcgtgc 300  
cccgattcca cactggacaa gctaaccctg aagtgccag cagggatcgg ctggttgtgg 360  
aacgtggggt gcaaggggtc cattatcatc ncctttccta cgtccatct 409

<210> 4529

<211> 349  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-C11  
  
 <400> 4529  
  
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 tttcctttgc aattctttct ttccctgggt aattttaccc tgggtgtgatt gtgtgtgtgt 120  
 ccttgcaaaa ctatttcggc tctctgtctg gcctctgcga cttggtagat tctcatggac 180  
 tccatggtgt tggatgatgt ggaggagga ggggtgcgtgt tagctaagtt agtccactcc 240  
 ccttgttcgt gttttgtaag ctaattagta gtatcggtag taccagtata tggaactttc 300  
 aatcggttca cgggcgagtt gtgtgctaca aaaaaaaag agagagaag 349

<210> 4530  
 <211> 299  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-C2  
  
 <400> 4530  
  
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 ccggagtgc aggggccgtg gtcgggggtg tgcaccccc aggcagagtg ctggcacacc 120  
 tagttcaggg aagaagataa ctttcggtga tgactgagct cggtgactcc gcttgaaatc 180  
 ggcagaaaac tcgaaccac ccctagtga atgtcgaata tttccttttt gcctggagac 240  
 tcgtacttgc tgtttttaat attatcttat tattattatt attgtggacc gtggtggtt 299

<210> 4531  
 <211> 338  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-C3  
  
 <400> 4531  
  
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 caaaggaggc cggcggcaag gggaaccacc ggggcaggaa gaagggcagc aaggccaaaa 120



agggcttga aacttccaaa atcaacacct ccaaggtgct caaccaggtg caccccaact 180  
 tggcaatctc ctcaaaggca atttcaacca tgaatccctt catcaacaac atcttcaaaa 240  
 acctcgccgg caattcgccc aacctggcaa ggtacaacag gaaccccacc atcacttccc 300  
 ggaagatcaa gacttccttc ggcctcttct tccccggc 338

<210> 4532  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-C4  
 <400> 4532

ggtcgaccgg tgctctagtg ctacacatat atctttttaga gcacggcggg ggtttttat 60  
 tatagaaata attgatctct catgcttaac ttatattatt ttgagagtcc tttagaacaa 120  
 catggcaatt tgcttttagg cataataaga agctttcata taagtgcatt gaataactaag 180  
 aaaagtttga tgcttgatga ttgttttgag atatggagat agtgatatca aagttgtgct 240  
 agttgagtag ttgtgaat 300  
 gagaaatact tgtgttgaag tttgcaagtc acgtagcatg 300  
 cacatatggg aaacattgtg taacaaat 360  
 gaaacatgag gtgttatttg gttgtcttcc 360  
 ttatgagtgg cggtcgggga cgagtgatgg tcctttccta caaatatatt cccc 414

<210> 4533  
 <211> 495  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-C6  
 <400> 4533

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 tcccaacaat ggaaatgaga ccaaatccac aatgttcaaa cccggcatgt cttgagagac 120  
 agaaagaata tatgcaatca aaacctgcta gagatgcagc agcaaaggct aagatggaag 180  
 ccgaagcatc cgcagcaatt gaatacccg ttcacatgga taacgagtgg aacattagt 240  
 ttcttgatga tagtgacaca gcaacgtcaa gcgttcaaag ggctgcaaca gacatccttc 300  
 cagaaggcct tgtccgtgaa cttccagatg aagataccta cgtggaacca cctgctgcac 360

cagccagctg tgggtgccatc gatgacgatc tcgaggagct ccagcggcaa ctcgacgccc 420  
 taaactcatc ttgacctcgc gcagatctgg ctcaaacagt gcattggaaa accaaaccag 480  
 atgccattgt ttgcg 495

<210> 4534  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-C9  
 <400> 4534

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 tcctcgccaa gaccatggag cccgacgccg acgtcgctct cctcgacccg aaggactact 120  
 tggagatcac ctgggctgaa ttgagatcaa cggttgaacc atcctttgct gagagatcaa 180  
 taatatatca cacggattac ctccacacag gcaacaatgg taacatcttc ggcattcagt 240  
 atcactgaca catgctgttc tgactgctga tggatcaatca cttgcatatg attacctcgt 300  
 tgtagctatt ggccatgttt ttgcttctgc tggaaagcaga acagagaggc ttacggaatt 360  
 ccagagagat aacgagaaga taaaatcttc 390

<210> 4535  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-D10  
 <400> 4535

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 acaaaaactg ttggagcctt atggcatatg tgaggttccg agaacaggcc ggcgggcact 120  
 aatccgtgaa tccaggggtgg actccaagta cctccgcggc tactctcttc cactgtaata 180  
 agaagtcatt tgcaacgacg acccaagaag ggtcacttgg ttttggttga gctgagcaga 240  
 atgtgtaggc agctcagctt tttgtgcggc tgtggtcttg tttaggatga cttgtttcct 300  
 ctgtggtaat gtgttgactt gtcgaataaa ttgctcttgg tagatgcaag tcgaggtttg 360  
 cccatgtatt gcatcgacaa gcagaataag tacatgcctc ctttt 405

<210> 4536  
 <211> 361  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-D12  
  
 <400> 4536  
  
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 ggaaccctgc acaatgaccg gttcct. a gttttgtttg tcttgctgga gttatagatt 120  
 gtgttatctc gattatgtgc cgtgctggca tttggatctt aatcttaatc cgttcgtctg 180  
 gcaccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 attaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
 t 361

<210> 453  
 <211> 244  
 <212> DNA  
 <213> Tritic.  
  
 <223> Clone ID: LIB103-060-Q1-E1-D2  
  
 <400> 4537  
  
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 ataggttcct gacgttcaag ctctccctc gtagactgac tgcagtcacc agtgcaagca 120  
 gattcttggt ctgccaggg catccccact cacagatgtg atggtgtgat attgataatc 180  
 cattggctag ttctcatctt gtggtgtgat gatggtaata aagcattgat ttgtttggtg 240  
 ccgc 244

<210> 4538  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-D3  
  
 <400> 4538

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 gagatctgct ttcgcaatta gaatctctcc gaaaggagaa tagcaccctg cagaatgaat 120  
 cccattatgt tacaatggag aggaatgagc tgcaggatga gaacgatgtg ctccgcaacg 180  
 aaatactgga gctacagaat gaactggcga cgcgtcctgc aggcaaccca ggttggggcc 240  
 atgctactgc tggatgcct cagctgcga gcacagtttt cccgtcacat cagccaatgc 300  
 agccgagcaa catcgcaagc gcagtattcc cttttgcagc agcactgcaa cagacaacca 360  
 tcctggaaca accttatgca ccaccaacac caccacggg 399

<210> 4539  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-D4  
 <400> 4539

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 tggaaaattc tagagtgaat atagtgtctt tagatcagtc agtggtaccc gtcgaagcgg 120  
 atatgttgct gggtacagat agtttctcaa aagagtattc agagataaat gaccagtcct 180  
 atccccccag aggtgtacgc tctaacttgg taggggtata ttgctcatat caatcatatg 240  
 gtgtcttgca ttgctgtgcc atcttcttag tttagacatg ctttgtgtga atgctacttg 300  
 tttagtttct atattatata tgtgaattat gcaatgccat cttgttttagc tgggcaacat 360  
 atatgtgaat tatgcaatgc catcatgttt agccaagaat catatatgtg aattatgtca 420  
 tgccatcctt tttccatta cgtattccat ttatcgacaa t 461

<210> 4540  
 <211> 315  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-D5  
 <400> 4540

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 cggcactctg cacaatgacc tgttcctttg agttttgttt gtcttgctgg agttatagat 120

tgtgttatct cgattatgtg cegtgtctggc atttggatct taatcttaat ccgttcgtct 180  
 ggcaaaaaag aaaaaggaaa agcaaaaaaa aagcaaatga aaaaagaaga aaaaagaaaa 240  
 aaaggattaa cacaccataa aaaacaaaat tgaccggaaa aaaaaaacgg gccgccccaa 300  
 gggttcaaac tttag 315

<210> 4541  
 <211> 506  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-060-Q1-E1-D6  
 <400> 4541

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 ttatatattgt tagagcgtgg gcatatcttt tgtagaaaga attaaactct cttgcttcac 120  
 ttatatctat ttagagagat gacaggaact ggatcattcac atggtttagtc ataaaatcct 180  
 acataaactt gtagatcgct gaatatgata tgtttgattc cttgcaatag ttttgcgata 240  
 taaagatagt gatattagag tcatgctagt gggtagttat ggattagat aaataactgt 300  
 gttgagggtt gtgattcnog tagcatgcac gtatggtgaa ccgttatgtg atgaactcgg 360  
 agcctgattt attcattgat tgtcttcctt atgagtggcc gtcggggacg agcaatggtc 420  
 ttttctacc aatctatccc cctaagagct tgccgctagt actttgtttc gatgtctaata 480  
 agatttttgc aataagtgtg tgagtt 506

<210> 4542  
 <211> 479  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-060-Q1-E1-D8  
 <400> 4542

ccgggcccgc cggggcagca acagcatcat gggcagcatc gcctcgtcca tcggcaagat 60  
 gggccggcgc aaaaccgaca gcagcgagct gcaggtgcag gtcgacgaca agccatagcc 120  
 atggaatgaa tgccgagcct ctacgattc attcattcac tcaccgtgtt atcacgaagc 180

atcataatac gtcacgcca atgatggagc tggctgctac tatttttgta gattatTTTT 240  
 cttataatTT tggggagatt ggcaattgtt ccatctgtgt agattcgatc ccaagctata 300  
 ggctagatcc agtcagtcca aataagtga gagtgcggtc gttgcttggg agcccccatc 360  
 cacacccctc ctggagttgc tgaaagggtg tacatgtccg gattgagagg ggttgttggc 420  
 cccgacatga tgataatgag aaccagtagc aaatacaana acggaaacgg ccccgtaac 479

<210> 4543  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-E12  
 <400> 4543

gccggatata taaaaaactt tcatataaag tgcattgaat actatgagaa gtttgatcct 60  
 tgatgattgt tttgagatat gaagatgggt atattagagt catgctagtt gattagttgt 120  
 gaatttgaga aatacttgtg ttgaaatttg tgattcccat agcatgcacg tatgggtgaac 180  
 cgttatgtga cgaagtcgga gcatgattta tttattgagt gtcttcctta tgagtggcgg 240  
 tcggggatga gcgatgggtat tttcctacca atttatatcc ctaggagcat gcgcgtagta 300  
 ctttgtttcg ataactaata gatttttgca ataagtatgt gagttcttta tgactaatgt 360  
 taagtcctg gattatacgc actctcacc ttccaccatt gctaacctc 409

<210> 4544  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-E2  
 <400> 4544

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 aaaattgtca agaagcttgg agctcgtggg gtcattggaag tctatccata agtttgtgat 120  
 gcaaattgtt tgatggtgac cgtttgggtat aaataaagta cgtagtgggt tgctataaga 180  
 aataaataag ggagtctggg gccttgcttt ttaatggaaa acacaatgga actcaaatta 240  
 gtagttcagc ccgtgccttg tcacaacata accggagcgt gtattttaa tagttttgag 300

aagtattgag tcactcagtg tgtgtctgtg tacacggtat gtctgtatgc tccaacatgc 360  
tgaaatatca agtttatatt atgtt 385

<210> 4545  
<211> 265  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-060-Q1-E1-E3  
  
<400> 4545

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tgtttaaagg cgaaaagata aataccacgg agaaacagtt aattgctcaa ggtggctttg 120  
aaacccccag aaaatgcatc cataacaatt gacggtgtga acttggcccc cgaatttggg 180  
gcggttaaagg ataaaatcag gcagtttcca aaaactttca ggattggccc atggggttggg 240  
gcaaccggga aaccgttgac aaatg 265

<210> 4546  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-060-Q1-E1-E4  
  
<400> 4546

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catgcaatgt gtttatgcag catcaagtt ccaaccaagt tcagaagatt aagaaacaag 120  
cttcttgagg tccatttagc cgcctgttcg atcaacaatg agtccatgg acgtcacagg 180  
caccgaaggt ctgccgttg attcgtggca gaagtcgtgg ccagaggtgg tgggcaagtc 240  
cataaaggag gccagggaga tcattctcaa agacaagccc gacgccgaca tcgtcgtgct 300  
gccagccggg tcgccgtga ccccgactt gagggccaac cgcgtgcgca tcttcgtcga 360  
taccgtcgct gacacaccct tcactggcta gctct 395

<210> 4547  
<211> 483  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB103-060-Q1-E1-E7

<400> 4547

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gccttgctga cgatttgaaa accctagaga gtaatagtag caagcctcgc acttcggaaa 120  
ctctatcgtg aacaaacaat ggcatacata agcactcaag cataagatgc aagggtaaaa 180  
ctcaaaagaa aagatccaaa ctgaacgttc aactgaagag ctttgatttg caaaaagaat 240  
caatcgaatc ggacctacga acacaaactg cgatcaaacg aagttcaaat tcaaactctgc 300  
ttgaaaccaa attttaattt gttaaaccac tgttcaagtt gattatctgg aaagagggta 360  
acaagacgaa gattttggcg ttggtttcac tggatttgga cgaacgagca aaaagtagcg 420  
agggtttgaa gatcanggac taatctgtga tagaagtatt cgtggatagg tcctgnccg 480  
ctc 483

<210> 4548  
<211> 409  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-E8

<400> 4548

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agtaggagag gcgatttttt ccccttcccc gttegatcta gttcgccggc ggccggctcgc 120  
tggtttcccc cctctgccg gccgcttcgg cggcgggagg gtgggggaaac ctcggttccc 180  
gtctgtacat agctaggatg gagtgggtgg ttcgccggca gcgccgtgga gaggaaggcg 240  
ctgtcgggtt ggtggtttgt ggcggcgggt atcttctccg gtggcggggg tctgcggaat 300  
ccgaccactt cccgcctcc ttccgtgtgc tcgtaactcg gcggagttgc cgtgcgcctt 360  
cttcccgtgc cggagtccgt aggcggcggc tccggttggt gaaagtttg 409

<210> 4549  
<211> 299  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-E9



<400> 4549

gggcaaaggc gcacgtgcag aagggttcca agggcccaaa gattggcggc ggcgggcgga 60  
agcgttgaaa gtgcgttgaa agtcgattac gccaatagac atagagttgt gctgcctagc 120  
cttgtttcct atcctactat catagacctt tgtcaagtta ttaccccgcc ctcttgaatt 180  
tgcaccttat ctgtgaggct gaatgggttt aacgttttgg attgtctcga tgagtttatt 240  
tataatgaat ggtacttatg ttggttccaa aaaaaaaaaa aataaaaaaa aaaaaagga 299

<210> 4550

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-F10

<400> 4550

ccaaggaaac aaaggccccg gccttggaac cccccccct cctcctccgg cccccggcgt 60  
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agggaactac ccaaattggt aaatttgcta taagtttcat cctggagggtg caagggcctg 180  
ttggcatcgg tatgatgatg aacatgaaga gaagaagaag gccaacctcg tcaccaactc 240  
ctacgggatt gatacaaatt ggtacgcaga ttctggagct accgagcaca taacggggga 300  
actagacaaa ttgacaatgc gagaaagata ccacggaggt gacaaaaaag caatccaatt 360  
ccccaccagc cccctcgac ctccggcgga atcaccgcac ctctccc 407

<210> 4551

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-060-Q1-E1-F12

<400> 4551

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acaagcacgg tatccccctt gtgaaaagcg ttaccggaag caagatcctc cgcacacctca 120  
aggctcatgg cctggcgccg gaaatcccag aggatctgta ctttttgatt aagaaggctg 180  
tggccattag gaagcatctt gagaggaaca ggaaggacaa ggactccaaa ttcaggctca 240

ttcttgttga gagcaggatc caccgtcttg cccgttacta caagcgcacc aagaagctcc 300  
 cgccacctg gaagtacgag tctaccactg ccagcactct ggtggcttaa gagggctctt 360  
 catctggtgt gctcttaccg gc 382

<210> 4552  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-060-Q1-E1-F2  
 <400> 4552

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 aaggtagatt ccgtgtccgc acctagtttg cgggctcgac atgtgcacga ccggattcca 120  
 ccgcgacagc caccatgcgc acctcctccg cacggggcga gacggtaatg acacgctagt 180  
 tcctcctcgc cggcgtgcta gagcatgcgc tcgtcctcct cttegtatgt tgtgtgcata 240  
 gactcggctc caccagctgc tcacgtgttt ggcacgcag cggcatcgca nggagggact 300  
 gcagacggcg tgagcgggcy agccttcggc ttcatggcac agggatggcg gcgacacggg 360  
 ggtgatgggt gagaaatttt 380

<210> 4553  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-F4  
 <400> 4553

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 aacaaaatct caagtagatg atcagcagtg gcttacttac tgggtgctgt actcgtttat 120  
 cactttgttt gagctcactt ttgctccgat acttgaatgg cttcaattct ggcccaatgg 180  
 aaaactgttc ttcaactgct ggctagtctt cccctgcttc aatgggtgctg cttatgttta 240  
 tgagcatttt gcgcggccaa tgtttgtgaa tcgccaaata gtcaacatct ggtacgtctc 300  
 aaggaaggat aagttgagta tacctgatga tgtactocca acccgagag aaatatattg 360

aactaaatgg accagaagca ttgagaagc taattatcac gtctacaagt acaa 414

<210> 4554  
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 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 tatagtacct actacagtac tatgccctag cttgctagag tagattagta gagtaggact 180  
 ctgctccact actagcaccg gaggagtagt atattctaata ctaaaatagt taaaaacttc 240  
 gatgcccgat catggaacga ctatgaaccg tgctcaaaga ccgtgtctac gtgggtgtttg 300  
 gacttatatg caaaaaatag caagatgccg tgcattgcac ggcacaccat catcaccaac 360  
 tcggtttttt ctctactcct actcctatag aagacttagt tggatgatgat ggggggtgagg 420  
 aggcgtgttc agccgggggt gcagcggacg gcgcagcact attcgatttg ttacaaaana 480  
 gtactttagt agatagatac a 501

<210> 4555  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-F8  
 <400> 4555

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 ccagagggag tccacgcttc acctcgtgct gggcctcgcc ggcggggaca agggctcctg 180  
 ctacccgccc aagatggagc ctaacctgct cgccctcgcg ctcaagtaca ggcagcacag 240  
 gcttggtttgc cgcaagtgct atgcacgcct gccctcagg tctgccaact gccgcaagaa 300  
 gaagtgcggc cacagcaatg agatcaggcc caaggagaag ctgcgctacc actgaagcat 360  
 tggaaaacttg accctgggag acatgccata gctggattaa ctgggagttc 410

<210> 4556  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-G10  
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gctttgtggc aaattgtttg ggaaccggtt tatgcattgc aattgcaacc ctgagctgct  120
gcaaatgttt gaactgatga ggtttatgca ttttgaactt aatagtaatg ctatttgcac  180
gccttcaaat ttggaagcaa atgtttcagc tgtgccaaaa aaaaaaaaaa aaacaacaaa  240
aaaaaaaaac tgaacataa acaaaaaaaaa aaaaaacaaa ccatacaaat aaaaacccaa  300
agacaaaaaa aagagcacat ccaaccaaaa caaaagcgac acgggaaaaa caagataaaa  360
acttgcttca aaaggcccc aaaaatttcc ccataactcc aaaaaaaaaa aaacggcccc  420
cc                                                                    422
  
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<210> 4557  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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tgaaaacacg ggcttggcgt ctaaaccctg agcagaatgc ttccaacgca gttcatgagc  180
ggagggtacct aatgcggcct gaaactacgt cggtatttcc ccaaagagga agggatgatg  240
cagtacagct atggtaggta tttccctcag ttatgaaacc aaggtatcaa tccggtagga  300
gaaccaagca acactatgta cacagtacct atgcacaaag aacaaaccct tgcaacccaa  360
catgtaaggc atcaatctgg tangagaacc aagcaacact aaaccg                    406
  
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<210> 4558

<211> 159  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-G2  
  
 <400> 4558  
  
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 ccaaaccagg gattaattcc gggcggaac aataaggcgt tgggaattcc cccgaagggt 120  
 acctaatggc atccaatcaa ctccccgggg cttcgaacc 159

<210> 4559  
 <211> 132  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-G3  
  
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 ggcaccattt taattgagga attggagcca attggcgcaa accgttttgc catccagtta 120  
 ttggggggcca cc 132

<210> 4560  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-G5  
  
 <400> 4560  
  
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 gttgttaaaa ccaatcacct tcgaccatca ggattactct agaagtatcc ggtatgcagg 180  
 atggactgcc ttgatattag atctgataat tgacggactc caatttacac aagtcctaata 240  
 ggacggcggc agtgatctaa acctgctata ccaggacaca agccgcaaaa tggggataga 300  
 cccaacaaaa attcaccata gcaacacttc ctttcaagggt gtaatgccag gccacatgc 360  
 ccattgtacg ggctctctac tgctagaagt tgtg 394

<210> 4561  
 <211> 513  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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 <400> 4561

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aaaagaagag gaagagcatt cacacggggt catatacaca agatgaggac aagtttattt  120
gccaagcttg atggagatta gccaagatcc gaggaccggc gcgcaacaaa agggcattgt  180
tttttggacg agagtccaca gaacattcca tgaaaggaag atgtttaagc cctaccaaatt  240
tacaagcaac cgtggcatcg gctctattca aaaaagatgg ttgttcatcc aacaagagtg  300
caacaagtat tgcgctgcat ttgagagcgt tgaagcacgt cncgtgagtg gtctcggcgt  360
tggggacatg gtatgctctc ctctttccag ccctttcctt gctacggcca tgagacttcg  420
gccgtgtata tgtttgcatt ttacttgggt gttgatcatc tgggtgtaggc atttcaatct  480
ttggaggcat tcaaggcccg acacaatgac aag                                     513
  
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<210> 4562  
 <211> 488  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-G8  
  
 <400> 4562

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agcgatggtc ttttcctacc aatctatccc cctaggagca tgcgcatagt actttgtttc  120
aataactaat agatttttgc aataagtatg tgagttcttt atgactaatg ttgagtccat  180
ggattataca cactctcacc catccacctt tgctagcctc tctagtacca cgcaactttc  240
gccggtacca taaaccacc atataccttc ctcaaacag ccaccatacc tacctattat  300
ggattttcca tagccattcc gagatatatt gccatgcagc tttccaccgt tccatttatt  360
atgacacggt ttttcattgt catattgctt agcatgatca tgtagttgac attgtatttg  420
ttgcaaagcc accggtcata attctttcat acatgtcact catgcatcgt tgcacatccc  480
  
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ggtacacg

488

<210> 4563  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-060-Q1-E1-H11  
  
<400> 4563

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catagatagc agaaggctca aggtgcccaag gagaagaacc tgatgctgga gggataaaga 180  
attcctcctg ggtctgatga caggggaatg cagtaaacac cagaagcatc aaaactatga 240  
tctggaacag tatcctgaat aaactatttt ctggattatg aatgaattct gaagcatggg 300  
gctataagtg aattatgtaa catggatttg taactatggg ggatgttaag ttaacgttct 360  
atcagtgcac cgtgaatgag tgctcaaaaa aaaattaaaa aaattattca aaaa 414

<210> 4564  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-060-Q1-E1-H12  
  
<400> 4564

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tgggaaatgc acccctgat gaaattggac caccacccc tgctgaacct ggaaatgctg 120  
cttcaactgg attcaaaaaa ccgcttgga ggccgaaaaa ggagaaacaa cctgcatcaa 180  
tctctgctga aactggagat gcaaccctg ctgggactgg tgatgctgaa actggagatg 240  
caaccctgc tgggactggg gatgctgaaa ctggagatgt aaccctact gaaactggag 300  
cagcaacgcc tgctgaagggt ggaaatgctg catcgacagg gatcaagaga ccgcttgga 360  
ggcctagaaa ggtgaagaag tttgggaggc caagaaa 397

<210> 4565  
<211> 325

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-H2  
 <400> 4565  
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 ttttcaggtt gctcgggtgag aatttctagt ttcccctaaa ttagattttt tttcttacca 120  
 attgtcaaaa aaagccacaa aaaagttaga tctattcatc cttttgtcaa agccagtctg 180  
 agcctttgca attttctttt cattgtttgc attattgaat tatcggttgc atcgtcgtgt 240  
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 tgtcgccgct gcatcgttat ccctc 325

<210> 4566  
 <211> 193  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-H3  
 <400> 4566  
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 gcccagggag ctaggcaagc caacctacaa cctaaacaat tgttcaatgg gaactccaat 120  
 aaccaactgg gcggaacctt gccaaaggccg aaggtaaaat ccggccccctc ctccctctcc 180  
 tccgggggtt ccg 193

<210> 4567  
 <211> 297  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-060-Q1-E1-H4  
 <400> 4567  
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 ggctcaagag gttctccac cacaggacca caggctaaaa gcaagggaca agcttcaaga 180  
 ggagattgat gcatttgaag aagctcccaa agccttggtc aatttggttc ccaagactac 240



atcaagttct acttcatcat gtacgactac aactccaggg atttccatca aaagggg 297

<210> 4568  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-060-Q1-E1-H6  
  
<400> 4568

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taacggggct gctggctccg gcacccacag tgggtctgga aaataaggcc aagaagaagg 180  
ccacgggcac tcggaagagt tcccgttttc aggtgttatc ggatgatgac tccaaggctg 240  
actcctctca caaagggtgag gaggagaaga agaaagcctc tccccacagc gggggagggg 300  
agaaaaggaa gcctcccaa cgagggaggc cgaagggtcc aagaaggga aaactctttc 360  
cccgactgc tctgcaacg ccaac 385

<210> 4569  
<211> 382  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-060-Q1-E1-H7  
  
<400> 4569

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agttgctgca aacttctccg gtgcatccaa accctgtgat atgatacgt atttcacaca 120  
taaacctcct tatatcttcc tcaaaacagc caccatacct acctattatg gcatttcata 180  
gccattccga gatataattgc catgcaactt ttcaccgttc tgttcatcat gacatacgtt 240  
acttttgtca tattgccatt gcatgatent gtagttgaca taatatttgt ggcaanagca 300  
caatgcatta tttttcatac atgtcactct tgattcattg caccatcccg gtgcaccgcc 360  
ggaggcattc atatagagtc at 382

<210> 4570

<211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-060-Q1-E1-H9  
  
 <400> 4570

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caggggggat tttccaaggg gaacgaggac gggccaaacc tcaactttga agttgaagga  180
ctcaagcaac acaagaagca taggcctggc gtttctcctg gtgacaggtc tgggtggtctt  240
gctaagcgag gcaaacaagg aaagaaccat aggtcaaagg attccaagtt tgggcatggc  300
ggccgcaaag ggatgaagaa gcaaaacact gctgagacga cgaatgactt cagaggggttt  360
aacaaccaga agggcgagtc aagaaacaag aagaggaaga tgttttgata cgggtgttg   418
  
```

<210> 4571  
 <211> 274  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-061-Q1-E1-A1  
  
 <400> 4571

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aagtgtttgt agcaacattc cttttctggt ttttgacttt gataagagtg taactttatc  120
tgtggtggtg tagaattcta aagctgaatc gctgtgcctt gtanaagctt gacattgcca  180
aatggcacca agaaaatttg gcataattat taggcgtgaa tgatgatggg gataaccatc  240
tgggaatgca naactttaga cttagggttc tgat                                274
  
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<210> 4572  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-061-Q1-E1-A3  
  
 <400> 4572

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 aaaagttgtc aaagaatcaa ttcaaccac tgcgaaaagc gaccgagaga gagaggaacc 180  
 ggaagcaaga agatggggca ggcgctgcgc aggctcttcg actccttctt ctccaccaag 240  
 gagatgaggg ttgtgatgct tggtttgat tcagctggca aaacaacaat cttgtatagg 300  
 ctgcacctgg gggaggttct tcaaactgtg cctacagtag gttttaatgt cgaaaagggt 360  
 cagtacanga atgtggcatt tactgtgtgg gatgttggtg ga 402

<210> 4573

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-A5

<400> 4573

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 ccgcattctc cattgggacg tcggcgctct ctggatgcct gccggccagc cagtcggtag 180  
 caatggctgc catctccttt tgggccgtcg tccggccatc cggaagagtg ctggagcgcg 240  
 aggaaaccat cgtgggagtg gtgtggacag gagaaaggga acggaggcaa atgactacgg 300  
 ctacggcccg cgcagcagtt tatatagcaa tggggggcgg cagagggagc gacgggtagc 360  
 gccggagtag ctgccttggc aatcgtg 387

<210> 4574

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-A6

<400> 4574

cggaaggact acataagaat tgggtcaagt tggagcgtga ttgagctgta ctcgtctatg 60  
 gtgcgtgatt taccgccttc cagtgcgtct gaactcgacg gactagcagt aatgcaaact 120  
 gaaaaatgga gcgtgatatt acagctctat gattatatac ctctcagctc acgtctaacc 180

gagattatga caagtatgaa agggcatatt ctataataag ttcgacatag tcacagtagc 240  
atcaggatat tcttttagcga gaatactatg agagggcaca ttcgaatcga actaagacga 300  
gcgagagcaa cgagcacaat cttggaaccg tacatccaat acagctgggc agcgtgaaca 360  
atcgagtcgg at 372

<210> 4575  
<211> 453  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-A7  
<400> 4575

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gtcggggacg gcgactagag gcctgcccga tcgggctgca gctaagctac ggggtcgtgg 180  
tggttgtgcg gtgaggtttg aggcttcgga gcagaggaag gggctctata tatagccgga 240  
ggatgagggg gtacgtggct ccgtcagagt tctctagaag tcggcgagcg acgacgaagg 300  
gtgccagcga gggggggaga gctcagcgat catgcggggag ctgttgacgc tcgcggaacga 360  
gcacaggaag caaagggggg agaagacacg ggcacgggag cactatggct tttggccgcg 420  
acgtaccggt gatcgctatg gcattctccg cat 453

<210> 4576  
<211> 133  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-B3  
<400> 4576

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acatatcaaa gattttttgt tttgggttaaa aaaaaaaca agaaaccaa aaaaacacaa 120  
caaaccacaa aaa 133

<210> 4577  
<211> 451  
<212> DNA



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agcccaagct tggggatgcc catggcaccc ccaagataat ccaaggacac ctaaaagcca 300  
aagcttgggg gagccccgga aggcaccccc tctttcgtct acttctatcg gtaactttac 360  
ttggagctat atttttattc gccacatgat atgtcttttg cttggagtgt cttgtattat 420  
ttgagtcttt gcttgtagt ttaccacaat cataacttgc gtacacaact tttag 476

<210> 4580  
<211> 145  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-C2  
<400> 4580

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aaaagaagat caatgctgta tcaattcatt atgatgacaa ggccatcgac attctcccca 120  
atttaaacc ttcaatgggg aaaat 145

<210> 4581  
<211> 330  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-C3  
<400> 4581

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tgatcttcac ttatatcttt tggagtagtt tgggtgttgc ctagtgcttc gcttatatat 120  
ttttagagca cggtggtggt ttaattttat agaaagtaat gaactctcat gcttcactta 180  
tattatcttg agagccttta gaacaacatg gtagtttgct ttggttatga aactagtcct 240  
aatatgatgg gcatccaaga gggatataat aaaaaaattc atatagagtg cattgaatac 300  
taagagaagt ttgatacttg ataattgttt 330

<210> 4582  
<211> 229  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-061-Q1-E1-C4

<400>       4582

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gtgaaccgct atgcatgaa gtcggagcat gatttatttt ttgattgtct tccttatgat   120  
tgccggtcgg ggacgaccga tggccttttc caaccaatct atccccctag gagcatgcgt   180  
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<210>       4583

<211>       483

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-061-Q1-E1-C6

<400>       4583

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tgccggacgat ggaaatgaac ttgataacca tgactaaaga ggcggacaag ttacgagctg   180  
atctggcaaa tgctgcaaac agagcacatg cagcacaggt tacacctcca cagcctggga   240  
caggacaagc tgcagcgggt tcagcagcca caaatccata tgcaagtgca tataccagtc   300  
acctctccgc atatcagcaa ggaacttccc aagccgcggc ataccagcag ggaactgccc   360  
aagccgcggc ataccagcaa ggaactcccc aatccgcggc ataccagcaa ggaaccccc   420  
aatccgcggc ataccagcaa ggagcccccc aatccgcggc ataccagcaa ggagcccccc   480  
aat   483

<210>       4584

<211>       472

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-061-Q1-E1-C7

<400>       4584

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gtcttcaggt gggcgctcta catggcaaag cactgtcctc cgccgagctt ttggctaaga 120  
 tgcgtggaac gcgagagggg gcagcttcag acgcactgga acatcagctc agcctgggct 180  
 ctgcttccaa ccagagacca ggctcgacag agaacggacg cacatctaac tcttcttcta 240  
 gtaggaacat tatcgtgcaa cctgaagtcc tgatccgcca gctgtgcacc ttcatacaac 300  
 aaaacgggtgg ctccgccagc tcgacgagct tgacggaaca tttcaagaac cgcatacaac 360  
 caaaggatat gctgggtgttc aagaaccttc tgaaggagat agcaatgttg caaaggggag 420  
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<210> 4585

<211> 483

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-061-Q1-E1-C8

<400> 4585

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 tgaccccgcc gctgcacccg gagatgatcc tggcggcgac caacaacggc gacatcgtgg 180  
 acgcctaaag caaagcaatg aaccacggac accaagaggc gtacgtacgc tgggtgtttgg 240  
 gggcgcaaaa tcaataagat ggttcgggtga aacggaggat gcttagggac gagggcttgt 300  
 ctttgtgatt tgtcagactc gtgtttaatt ccgatgttta tctttagttt tcttgtgtta 360  
 gcgtattttg ttcatgccac ctgcccggca tgtgctctgc tctgctctgc ctacggcgag 420  
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 aaa 483

<210> 4586

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-D1

<400> 4586

tataataaaa acgaccatat tgagtgcgtt gaatactaag agaagtttga tacttgatga 60



ttgttttgag atatggagat agtaatatta aagttgtgct agttgagtaa ttgtgaaatt 120  
gagaaatact tgtgttgaag tttgcaagtc ccatagcatg cacgtatggt aaacgttgtg 180  
taacaaattht gaaacatgag gtgtttctttg attgtaatcc ttatgagtgg cggtcgggga 240  
cgagcgatgg tcttttccta ccaatctttc cccctaggag catgcgcgta gtgcttcggt 300  
tttgatgact tgtagatttt tgcaataagt atgtgagttc tttatgacta atgttgagtc 360  
catggattat acgcactctc aaccttcc 388

<210> 4587  
<211> 295  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-061-Q1-E1-D2  
<400> 4587

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ctgagggatt ttgcagtggg gttttagagg tgctatgctg ctgaactgct ctgtgtttgg 120  
gatttgaaat aaaacgaagg gagatgtgcc ccgcccttaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataaa taaaaagatg ttaagaaggg 240  
aaaaaaaaaa aaaaaaaaaa agcggccccc caaaaggttc aagctttaat tacc 295

<210> 4588  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-D5  
<400> 4588

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cggatatgct atcgaaagg ttaggtgctc ctgttgatc agttattgtt ggttcgaagg 120  
acttcatata caaggctaag attcttagga agacactatg tggtggaatg aggcaggttg 180  
gaattctctg tgctgctgcc tatgttgagg ttcgcgacac ggtaggcaag cttgccgatg 240  
accatacgaa ggctaaagtt ttagcagatg gactgaagaa aatcaaacag ttacagtcg 300

atctaacttc agtggagacc aatatggtat tctttgatat tgcggatcca cacataacgc 360  
 ctgacaaact gtgtcaagtc ctggaacagc gcaatgtgct tgcaatgcca gcaagctcca 420  
 ag 422

<210> 4589  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-061-Q1-E1-D7  
 <400> 4589

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 ctcaaataaa ggcaccacct gcaggaagag tcgtcgtgct cgatgagaat ggagtgccac 120  
 ttggacacag gaaatctagt ctgtgcaacc aggttgctggg acacaacaag ctgacatgtc 180  
 caacactctt ggaaagaaac aatgatgagg aggtcaagca acccaaactct caaaaatagc 240  
 agcccaaagt tatggaacaa aagaaggagc cacacccaaa gaaagcaagt agtagacttt 300  
 gtagcatatg caaggagtat gaaccacata atgcaagaac atgcccgagg cacgctgatg 360  
 ctgaaaagac aagcaaaaag atagagaaga aacataaagc aaaacctaga gccatcaaca 420  
 agaaagtggg ggaagatgaa g 441

<210> 4590  
 <211> 483  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-061-Q1-E1-D8  
 <400> 4590

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 agcagcaacg cctgctgaag ctggagatgc tgcttcaact ggattcaaga aaccgtgtgg 180  
 gaggccgaga aaggagagac caccagcatc aatccctact gaaactgaag atgcaacccc 240  
 tgctgagact ggtgatgcaa ggctgctga aactggagca gcaacgcctg ctgaagctgg 300  
 agcagcaacg cccgctgaag ctggaaatgc tgcacgaca gggatcaaga gaccgcttgg 360

aaggcctaga aaggtgaaga agcttgggag gccaagaaag gagaagccag aagaagcagc 420  
aatatctggg gaaactggag atgatgctgc agcagctata tttgctgaat ctggagcagc 480  
aac 483

<210> 4591  
<211> 253  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-E1  
<400> 4591

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cgaagaagaa gtaagggcct ttgcttggtt taggacggta tccctgtggc aatgttgctg 180  
agtgcttaat tataactaga aaagactttg tcatttatgt catctcctgg tatgctaaga 240  
ggcattttgt agt 253

<210> 4592  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-E2  
<400> 4592

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tccgagatat attgccatgc aacttccatc atcatcatat acatgacttg agcattcatt 180  
gtcatattgc tttgcatgat cataagatag ctagcatgat gttttcatgg cttgtccgtt 240  
tttttgatgt cattgctacg ctagatcatt ccacatcccg gtacacaacc ggaggcattc 300  
atatagagtc atatctttgt tctagatatt gagttgtaag taaataaaaag tgtgatgatc 360  
atcattatta gagcattgcc ccagtgagga aaggatgatg gagactatga ttccccacaa 420  
gtcgggatga g 431

<210> 4593

<211> 395  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB103-061-Q1-E1-E3

<400> 4593

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 tcgtttttgt tcgatgagcg acaagctgca taaaattttc tatatccatg gattttgaag 180  
 ctaactcttc aaacgtgagg ggcctcactc cttgtaactg gacagccact tccgancgga 240  
 gattgttcat gcacatgcgc actgcttccg gtcattgat tggctgtggg caatgaagac 300  
 ttaggtttct ccatctgttt atgaaatcag ccgccctctc gttgaaccct tgttcagttt 360  
 gggteaactc agttatgccc accgtcctct gtgtg 395

<210> 4594  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-E4

<400> 4594

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 gccttgttca tcttttccct tccggaccac gcatacgcgt cgcataatcat atctcgcata 180  
 tcatacatgt tttgcatcat gttgcttgtg catttctcgt gattgattgt ggttcggttg 240  
 ttgtgttctt gtcttgggta gagccaggag acgagttcgt gaacgaggaa cctgtttagt 300  
 acgcttacga ggatcaagct ttcgacaact ctgagaacct tgcaggcaag ataaccaccc 360  
 ctcgaaatca cttctatctt tgctttgccca attgttccgc tcaattgccca tgttgcgcta 420  
 cctaacac 428

<210> 4595  
 <211> 470  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-E5

<400> 4595

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atgtgaaggc ttatagcaat gtgaacaagt atctacttac tggtaggtag agaaacatca 180  
tggaacatgaa tgcaggtttt gggggccttg ctgcggcgat cgagtcccca aaatcttggg 240  
tgatgaatgt ggtgcccaacc attgcaaaga ttgcaaccct gggggctgtt tatgagcgag 300  
gattgattgg catttaccat gactggtgtg aagctttctc tacttatcca aggacctatg 360  
atcttatcca cgctagtggc cttttcacct tgtatagcaa taagtgcagc atggaagaca 420  
tcctccttga gatggaccgc atcttgaggc ctgaagggtgc tgctataatg 470

<210> 4596

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-E6

<400> 4596

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caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacaaac gaaaaaataa aaaaaaaaaa 180  
aaaaaaaaaa ggggccgccc aaaagggttca aacttaactt acccttgaag gcaacttcaa 240  
acccttccaa aagtgcctcc aaatttcatt ccaggggcct tctttttaa acttcttaac 300  
gggaaaaccc ttgggtttac caaattaaac ccccttgaac aaaatcccct tttcccaact 360  
gggcttaaaa ccaaagggc cccaacgttt cccctttcca aaaatttgcc caccctaaag 420  
ggcaattgga accccccttt taccggc 447

<210> 4597

<211> 462

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-061-Q1-E1-E7

<400> 4597

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cgagcgctg aggcaagagc tgaagcatga gcttaaacag gggtagagag aaaagcttgt 120  
ggacatcagg gaggagatac tgcggaagcg gagagccggg aagctcccag gagacacggc 180  
gtccactctg aaggcgtggg ggcaagccta cgccaaatgg ccgtacccaa ctgaggagga 240  
caaggcgctg ctggtgcagg agacgggggt gcagctgaag cagataaaca actggttcat 300  
caaccagcgc aagcggaact ggcacagcaa ccctacctcg tcctcgtcgg acaagagcaa 360  
gagaaaaagg aacaatgcag gtgacggcaa cgccgagcag tcctggtang gcgggcgctg 420  
ctggagagcg aagaacgaat gccccatata tgtacatagc gc 462

<210> 4598

<211> 184

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-E8

<400> 4598

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gtgctgcag cattctctta gacatgggtg gtttgacaag cttgtgccat gctggacgat 120  
accctgcggg tgcgcgcagc cgggtgggctc ccaggatctc cggcgtccac tctgtttgcc 180  
tttc 184

<210> 4599

<211> 403

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-061-Q1-E1-F1

<400> 4599

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tcctggagcg cgcaaggaag atgtcagaga agattgggag gctggagggtg gaaatgcaga 120  
aggccaaca ngccctggtg aagtatgagg aggagcagac gacgtcgaaa accgtgggtcc 180

agcgggtccaa agtgcagctg gtggactatc tctacggctg aatgcgggaa agccggaagc 240  
 cgcggttctc gccctgccgt tgcataaaag cgaaaaccat tgatgactga ctctgccttc 300  
 gttcgcgccg ctccctttttt ttgaaggcgg aatgtgnaaa ggttgggggtt ttcagtttca 360  
 gatggagcga ctcatagtt catgtttttc tacgtanata cag 403

<210> 4600  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-061-Q1-E1-F10  
 <400> 4600

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 agatgttccg gaggggtgagc gagcagttca ctgccatgtt caggaggaag gctttcttgc 120  
 attggtacac tggatgaaggc atggacgaga tggagttcac cgaggcggag agcaacatga 180  
 acgacctcgt ctccgagtagc cagcagtagc aggatgccac tgctgacgag gagggcgagt 240  
 acgaggatga ggatcaggag cctgaggagg acatgtaagg tgggatgtcc atgtcgtgct 300  
 ttgctgggtg ggggttcttg gggcagagtt tgatctgttt ggtgctttgt tataaatctg 360  
 tttatcatcg caactaccgc ttgtacgcca ccgccattct tctgccttt cctaagctct 420  
 gtattt 426

<210> 4601  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-061-Q1-E1-F4  
 <400> 4601

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 ctttgacatg tccgaatacg gtacgaaggg atctgtgttg cgcctcatcg gagcacctcc 120  
 aagctatttt ggttatgacg atggaggaca actgactgaa aaagtcaaga gtcacccgta 180  
 cagtgtcacc ctgtttgatg aggtggaaaa ggcgcacgc gaggtgtaaa atgttttctt 240

tcaacttctc gatgatgggt tgttgaccga tggcaaaggc cgaacagtag atttcanaaa 300  
caccatcatc attatgacct caaatcttgg gtcaaagcac cttgcagcag gaatgggttg 360  
gaagaacaca ntgcaagaaa cacacaagct tgtcatgaa 399

<210> 4602  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-F6  
<400> 4602

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caggtgagcg ccaggtaggc ttctgctccc ttttttttta tttctgtttt ctattttctg 120  
tagtttgttt tgatttagtt tagcaactaa atcatttaaa taaattcagt agaattttat 180  
gtggcttgct aaaatatata taaagccact caciaacttc cagaattatt ggagtcatat 240  
ttaatatata ttaaatataa atccaaagca aatagttatt ggattaattc aaatggccaa 300  
aataattatc tctgtgactc caaaaatatt ggtttgaatt ttacctctca ccaatatttc 360  
catggaataa caggaacatt ttcttggaac catt 394

<210> 4603  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-061-Q1-E1-F7  
<400> 4603

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cacctaagaa caaacctctg ggaacatcgt cgctattcac gattctgcct gaaaaaaaaag 120  
taaatagaatt gattaaggaa aatatggaaa tgaattaaat aaaaaaagta agagatcaga 180  
tgttgtaaaa ataaataaaa aaacaaatga aaagggggcg atcctaaggg ttcaagggtt 240  
atttcagctt gaaggcaagg taatacccct tcaaaattgc cgctttaatt caattcaggg 300  
gcgttggttt taaagggact ggacgggaaa aaccttgggt tatccaatct aaatgccatt 360  
gaagaaaatc cccatttcgc aattgggggt aatatgtaaa ag 402



<210> 4604  
 <211> 478  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-061-Q1-E1-F8  
  
 <400> 4604

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 ctaacgcagg atcgcatcgc attttctgga aggacttcga agtggagttc tggtttgcct 120  
 ttcctgatga tccttttagc cttatgtacc ttgagaccaa caactcttgg ccacgaaaac 180  
 ccatgatatt tgtacacatt tgaactatct gctctccata atgttcgttt tgcctcacct 240  
 ggaacctgca tagattgagt agaacttttg cattatgtta aaaattggag atcttaaagt 300  
 ttttctaagt ttgttaccaa cgttcgcacg atagagcata taaattaggt ccgtagctgt 360  
 aaatgtatct aaaattctag acaagcaaac acatcatttt ttgttttttc tgatgttaaa 420  
 ccatggcatt ccttcttatg atgggtgatat atgtaccttg ggcattgtatt ccgcaacc 478

<210> 4605  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-061-Q1-E1-G11  
  
 <400> 4605

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 tgggtgcttg acaagctgaa ggccgagcgt gagaggggta tcaccattga tattgccctg 180  
 tggaagtctg agaccaccaa gtactactgc accgtcattg atgctcctgg tcaccgtgac 240  
 ttcataaaga acatgattac tggtagctcc caggctgact gtgctgtgct catcattgac 300  
 tccaccactg gtggttttga ggctggatgc tccaaggatg gccagaccgc tgagcatgcc 360  
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 accactccca ag 432

<210> 4606

<211> 424  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-G12

<400> 4606

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agctcgaaat gcttctgagt agaagaagca acctttccca cttccacaac gctcgttcgc 120
tatctatata cgggtgcggtg gacgacctac tattccctct tgataagttt atctatctgg 180
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cggccaagat caaggagctg cgcagtctgg aaacgttgga catgagccac acagaggtca 360
gtgagctccc atcagaagcg tgcgagttgt cacggttgga gacgctggac ctaaggagca 420
cact 424
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<210> 4607  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-G2

<400> 4607

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tctgtcggta cggcgggtacc atacaccac catatacctt ccttaaaaca gccaccatac 180
ctacctatta tggcatttcc atagccattc ctaaataat ttccatgcaa cttgccactg 240
ttccgtttat tatgacacgc ttcattcattg tcatattgct ttgcatgac atgtagttga 300
catcgtatatt gtggcaaagc cacctttcat aattctttca taaatgtcac tcttgattca 360
ttgcacatcc cggtagaccg ccggaggcat tgacatggag tcatattttg ttctaagtaa 420
tgagttgtaa ttttttga 438
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<210> 4608  
 <211> 404  
 <212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB103-061-Q1-E1-G3

<400>      4608

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ttgcctgccc gcacaccggg gtcgctctcg cggcgctctt caagcttcgg gaaaagggca    180

caatcggggc aaacgaccgc acggtggctg tcagcacggc gcacggcctc aagttctccc    240

agtccaagat cgactaccat gatcagaaga ttgaggacat ggcttgcaat tacgccaacc    300

caccggtcag cgtgaaggcc gacttcggcg ccgtcatgga cgtcctcaag aagaggctca    360

agggtaagct ttgagcatgc cctcctgctg ctgctgctga accc                            404

<210>      4609

<211>      318

<212>      DNA

<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB103-061-Q1-E1-G4

<400>      4609

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ctcatcaggt tcaacttccc tccaattcac ttcttttaggg agaaaccctt tccctaaaaa    120

ggatcaatcc taagcagcaa atatctggcc tttggatcgg tgataaaagg tgtaccaaac    180

agtccctttg ggttacccta taaagacaca tttctcctat ttgggttcga gcttatcagg    240

ttgaagcttt ttcacatagg catcgcaacc ccanacttta agaaacgaca actttggttt    300

cttgcaaaac catagttc    318

<210>      4610

<211>      482

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB103-061-Q1-E1-G8

<400>      4610

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aaagcaagaa ggttcggcag ttcaagcacc tctgcctcac agatgccacc tggaaggact 120  
 ctgcctcgga gcggttcagc acgcaacatg tgatgctgat atgaagcatt aaaaagacct 180  
 tggagcatcc cttgtgtagt tagttgaatc atggcatcca gggaccctct gctgacttgt 240  
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 cagcgactcg agtcgggtga agttagtgtc gttgatgaga tttggtggtg tttttattca 420  
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 gtacctcggg gcagttctgc ctcagaaatc aaccgtccaa cagtgcatac gacacaatgc 300  
 taaaaatgca gcctgacaac gcccgttatt tcatgactcc cacgatagac agcagcttca 360  
 tccacgctcc ggtcccttga gtcgagtcga aagcagtga cctg 404

<210> 4612  
 <211> 376  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-061-Q1-E1-H2  
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taaactagtt atgaaatagc taatttagaa gtccctcaaca aatcctaaag ggcaacttat 180  
 attttaagcc ggaaagaggc atcttatttt gtaagccact caaaagaact agccctacaa 240  
 ataagatata cacatttaca cacacacata tgctaaatgt cacttgctctg aagatgaatt 300  
 tggcactact tgattatgcg tatagcatcg acaacgcgac ccgtcatggg gtcccatcgg 360  
 agatgtgcct ggaacg 376

<210> 4613  
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 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 4613

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 gcttgtcaca agggcccgag tgccatgatt tcaattctga accaataagg tttccaggaa 180  
 aaaaggtgag tccttgatcc aaccttgagc ttcaaataac accaacaatg tgtaagaatc 240  
 cggaaccccc aaattgacaa taatcggaac aattcccggg gatgacaata gtttgaggag 300  
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 tatcccttag tttccgttan ggacccgctg ccacgggagg gtaggacaaa gatgtcatcc 420  
 aagttttcttt tcataggcac gtatgactat attcgaaata catgcctaca ttacattga 479

<210> 4614  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-061-Q1-E1-H8

<400> 4614

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 gcttggggat gcccaaggaa cccaagata ttcaaggata gccaaaagcc taagcttggg 180

gatgccccgg gaaggcatcc cctctttcgt ctttgttcat tggtaacttt acttggagct 240  
atatttttat ttgccacatc atatgtgttt tgcttggagc gtcgtgtact atattagtat 300  
ttgattttta gtttaccaca atcacccttg ttgtacacac cttttgggag aagcctatTT 360  
tattaggatt tgctagaata ctctatgtgc ttcacttata tcttttgagc ttgatagttt 420  
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<210> 4615  
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<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-A1  
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ttcagaattg gaatatttcc aaatgaaatt caattattct cagaaccctt tgtcatttaa 180  
ataaatggaa gaagtcaggt catcttctct cgggggtttt gtgttgaaaa gaatttgaat 240  
tcacggggat cagaaagcca ttatgaaagt ttgggaaagt cgtttttatt cctctcatTT 300  
acctttcaaa aggttttg 318

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<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-A10  
<400> 4616

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tggtatcctg ctcaccaagt ttgacgctat cgacgacaag gtcggagccg cgctgtccat 180  
ggtttacata tccggatctc cggatcatgtt cgtcgggtgc ggccagtcct aactgacct 240  
gaagaagctg aacgtgaaat ccacgtgaa gacctcctg aagtaaaatg gtagtgctag 300  
tacatgtcgt gctccgatat gtgcgcgatt caaggagtct ctgttatatc tccgaaaatc 360

ccccgtgaca tcgtcgtttt ctcgtttggg ttggcgtgaa actgtcgccc ctagcaaact 420  
 ttt 423

<210> 4617  
 <211> 413  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-A11  
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 tatatccatg ttccatgtat actcccccta tatataaagt cattttcact ctgtgggata 180  
 ctagatgttg cagtaattag ataagtgaag taaagtaaaa cctcatgtgc acttcatctt 240  
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 gccatgaatg gacagaaacg gtacagcaac taggggttctc ggaacatgca aagcagccga 360  
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<210> 4618  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-A12  
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 atgagtatcc tatgccaata gccgatatgc ttattaatga tgcttctgga cataagggtta 180  
 ttagctttct agatggtaat gccggatata ctcaaatttt tatggccgaa caggacatgt 240  
 acaagacagc tttttgatgc cctgatttcc ttgggtttatt cgagtggaca atgatgacat 300  
 tcagattaaa aaatgctggc gccacatata acagcgctat gaatttgatt tttcatgatt 360  
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<210> 4619

<211> 438  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-A2  
  
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 tgggtgtgttt gacttggcgt agatctcccc ggcaacggcg ccagaaattc ttcctactac 180  
 ttcttgagct tgcgttggtt tttcccttga agaggaaagg gtgatgcatc acagtagaga 240  
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 taacctata cctgcgcaaa caattaaaca cctgcgccc aacgcaataa aaggggtgtc 360  
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 acaaagatca attttttt 438

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 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-A4  
  
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 ttgacaaagc cctccgtccc gtcaacttat taggcccaca attcatcctg ccactatact 360  
 ggggtcccagc taacaggggg agtattcatt tttttgtgcg taataacgag gcacttcctt 420  
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<210> 4621  
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<213>       Triticum aestivum

<223>       Clone ID: LIB103-062-Q1-E1-A5

<400>       4621

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gtgtgctcaa atctgctgtc ctgcaacaca tcagtgttgt gaagcctgct atgctgcctg   180  
ctgtgttccc gcgcttcatg tcagtatcac ctgctcaaata agaggagagt ggatttgaga   240  
gcagcactgt tgcggacatt ttgaagtcca aagggaagag tgctgatgga tcatggctct   300  
ggtgcaccac tgatgacagt gtctatgatg ctgtcaaata gatgacacag cacaatgtgg   360  
gagcttttgt ggttggttaa cccggggaag ataaatcaat tgctggcatc gtcacagaga   420  
gagattatct ccggaaaata atagtgcagg gtcgactctc caagtcaacc           470

<210>       4622

<211>       462

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB103-062-Q1-E1-A7

<400>       4622

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gaagccctcc atggtggatg cccctccgg tggacctcg gaacaggccc caagatggga   180  
tctcgtggat acagaaagtt gcagcggtag aattaggttt ttggctcctg ttctgatcgt   240  
tcggggatac gtaggtatat ataggaggaa ggagtacgtc ggtggagctc tgagggcccc   300  
acgaggtagg gggacgcgcc ctccaccctc gtgaccgctt ctggcgcttc ttggagtagg   360  
gtccaagtct cctgggtcac gttcggttgg aaaatcacga tcccgaaggt ttcattccgt   420  
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<210>       4623

<211>       475

<212>       DNA

<213>       Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-A8

<400> 4623

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tggtggacag caccaacaac ctcaaggcgc cccatgggat gggcaccttc acggagcagt 180  
ccaactgcta cgacgtgcag aacggcaaca acgccgactg gggctcctac ttctactacg 240  
gcggccccgg cgggagcgcc aactaccagt gatgacaaga acaccacat gactgacgag 300  
tgagtgaagt gtagtgtggt gcaccatctg cattgttagg cctagatgat gataggtgtc 360  
atgtgaatgg gtctgtgtgt tgtctcctga ttttttctt ttttgatttt ctcccggtgtg 420  
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<210> 4624

<211> 417

<212> DNA

<213> Triticum aestivum

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<223> Clone ID: LIB103-062-Q1-E1-A9

<400> 4624

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gtttatttga tccatggtgt angaagcgcc ggtcaacacg gtggagctgc gccgtgggag 180  
ggtgctggtt tggagatccg cgtgactatc cgagcgctag tccacctcag aatggaagca 240  
agtgggtgcct tgcgggtgcc tcgccatgcc atggcagtgc cctgtacgaa accaatgcac 300  
attacgtttt tcatgaccat gaaaagataa acgtgaaggt cgggcatacg ctataacttg 360  
atgatgcata taaaatatga tgtctaagaa agattcggtg cacatgtttc tgaatgt 417

<210> 4625

<211> 444

<212> DNA

<213> Triticum aestivum

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<400> 4625

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ggcattggac cgccaaaagt tcatcgaga agaatcaag aaattggaag cagcaggcct 180  
tgtcagagga gtgtccatc ctacgtggtt ggccaaccct gtagtcgtgc gcaaggcaaa 240  
cgggaaatgg aggctttgta tcgactttac cgatgtcaat aaagcttgtc ccaaagacct 300  
acttcccttg ccgcgcattg accagattgt tgactccacg gccggatgtg acttgctttc 360  
atttcttgat gcatactcag gataccatta gatcttcacg gcagaagagg atgaggagaa 420  
gacgcattca atcacccatg tgtc 444

<210> 4626  
<211> 334  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-B3  
<400> 4626

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agttgttgta tgttgtgtag cataacgatg ctttctgcct gtggaattaa accataaaga 180  
ttgccaaaaa aaaaaaatga caaaaaaaaaa aatcaatggg cacataaaca tggtgctcac 240  
gtgttgaaat atgttctgtg acgcggaaaa gctaagtgtg ctgtcacgaa aaaattgggc 300  
ccaccaagag gttcaagcct aacttggaact ggaa 334

<210> 4627  
<211> 118  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-B4  
<400> 4627

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cgttgtgtag caaaacgatg ctttctgcct ggggcagtta aacaataaga ttgccaac 118

<210> 4628  
 <211> 476  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-B5  
  
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 gctacgactg ggcgagaaat ttgttacatc cattcttttt ttacggcaaa gaccggtggc 180  
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 ccaaaagcct aagctcgggg atgccccgga aggcattccc tctttcgtct tcgtccatcg 180  
 gtaactttac ttgaggctat atttttattc accacatgat atgtgttttg cttggagcgt 240  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-B8

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 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-B9

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 cagacaagtc gggagggggt ttcttgctcag ctagtcgggt tctggcttgt cagtagctgc 180  
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<223> Clone ID: LIB103-062-Q1-E1-C1

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 <213> Triticum aestivum

<223> unsure at all n locations  
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 aaggatgagt atgtcaggat aagcttctcc gggttgagaa ggctcatctt anaggctgtc 360  
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 cacaactaa 429

<210> 4634

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 <212> DNA  
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 <223> Clone ID: LIB103-062-Q1-E1-C2  
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 tctatgtgct tcacttatat cttttgagct aggtagttgc tctagtgtt cacttatatc 180  
 ttttttagagc acggcgggtgc ttttattttg aataaattga tgaaccctca tgcttcacta 240  
 atattatttt gatagtctcg aaaatagtat ggcaattttc ttagcttatg aatttagtcc 300  
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 aattcctttt tcgacgctct ggagaataat aactactggt atatcattct atatcaaagc 180  
 .cggcttggtga aataaatgat ccgccgtctt gccttcaaaa taaaaaaaaa aaacataaaa 240  
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 tcatgggggt ctactgatt catgtcacat ggagttcgta tataatggtg gatgttgagt 360  
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 <223> Clone ID: LIB103-062-Q1-E1-C8  
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tgttgtaata aacttgccat tttgtaacag aagcatattg ttatgtacag gttgccttgg 180  
 tggtagagagc cgcaaaggaa gtttgagatg tacagggtgaa gttgatgatt aagagggcct 240  
 gtgcaatggt gtatacttgt tgatgtaatc tgggtgtagtt gttattgagg tcagggtgaat 300  
 tgatggttga tgtgttcttt gacacatttt aaaaggcctt tactcaatga aacaattgaa 360  
 tagaaatttg tgaaatggaa tagaatatgg tctattcaat ggaaactgtg aaagcatggt 420  
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<223> Clone ID: LIB103-062-Q1-E1-D1

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 gagctcgga ggacgctggg tctggaggaa tgtgctttct ggatgccgtc aaggaccggt 180  
 tcgagccttg agctaattca taccatgcgc cacaacatcc ccacgggctc ttctgtggag 240  
 attaatctcc ctgttgtaaa ccaagtctta agtaccaacc gtgcgatcat agtgccacat 300  
 acttctcctt tggcgaggat ccacctgtt caaggcggc atgtctcacc cgaggtggct 360  
 gctgtgagat tctctgctg catctttcaa actttcatcc cgaagctt 408

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 <212> DNA  
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<223> Clone ID: LIB103-062-Q1-E1-D12

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 tacatcatta ctgttgctag caatgctctc taaatagaca ctgcaattat catgtacatc 180  
 attgctgctg caataaacca ctaagaatta ttcaatatct agcctagcgc cttcgttatc 240

atcaaccgag ggttgaggcg gagttacaaa atctgaatga gaaaccaagg gattgtccaa 300  
 gtcagcgaca tctttgttat cttcagagct gttagaagca gctgagatgg cgtcaccgca 360  
 ttctgaatgt gttctgtcca catatgcttc gggtaaggag ctctcggcca catcagcat 419

<210> 4641  
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 <223> Clone ID: LIB103-062-Q1-E1-D2  
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 gttcctgcct aagtaagtag gctaggaaag gttctgtcaa cgcggcgatt actgcaatta 180  
 tgacgtgggc ggaggatggt atgtcgtctg ccgaatcacc ggttggtgcg gttttctccg 240  
 gtttgctgct accgggctcc tcttcccata gtacggatgg cttgaagagc cgttccagga 300  
 agatatttgg agggacagca tcacgtttcg caccgatgcg tgccaggacg tcggccgctt 360  
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<210> 4642  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-D3  
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 agggtatcgg aaacggagcg ctcttgatgg caatgaatta ccatgtcaat acatcaaata 180  
 ccgctttgtg ggattacatg ccaatggttt tcaacatctg accttctccg aaatttttgc 240  
 accgtacttc cgccatgtta cgccgcgttt catcttttgc ttgttatgat agtatttcaa 300  
 cacttttttg tgggaaaagc tgataatggt tagatgttgg gtatacagaa gcatagaagg 360  
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tgcaactgtgt tatta

435

<210> 4643

<211> 467

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-D4

<400> 4643

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tccaactagt actgttggtc ataacacttc tattaagatg cttaaagaag ttatttttcc 180

gatgtttgga gtccctagat atttaatgac tgatgggtgg tccacatttta ttcattggtgc 240

ttttcgtaaa atgcttgcta agtatgatgt taaccatata attgcatctc catatcatcc 300

tcaatctagt cgtcaagtaa aattgtttat tatagagatt aaattgatat tgcaccagac 360

tgtaaataga tctatacaga attgggtccac gaaacttgat gatgcactat gggcatttat 420

aactgcttat taaaatccta tgtgtatgtc tccgtgtaaa ctggttt 467

<210> 4644

<211> 367

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-D6

<400> 4644

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tcgggtatat ttactttgca tgcacgtggt taaagcatgt cgcattcattg cgtcacttct 180

tcttgtgttg caatagcctg gtcgacctct atcaggtgtg cacattgagt actttcccct 240

atttcccttc gattgtcttc agcttgggtt ctagattatc attggcggtc gatcacctct 300

gtgtcggaac ttcgattctt ggggtgttgc acctgtgctt tgattacagt tgttcgccat 360

tggtttt 367

<210> 4645

<211> 369  
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 <223> Clone ID: LIB103-062-Q1-E1-D7  
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 ccaagtgtga c gatcctggc tttggatgtg cgttgtggaa tccgcagtta tgccaagatg 180  
 atccctactg tcatcagatg ctttccaaac gttgagacgc tccacatcat gtctggagaa 240  
 actggtcaac cctctggcaa gcacaacctt gatttccgga atgagtctgg taccatagca 300  
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 ctgtcttcc 369

<210> 4646  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-E1  
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 agctactggg tgctgggtgt atttttcttg cagctggcca tgctcggctg cgggtgggtg 180  
 ctggtatacc ggtgctcggg gaatggcatt gttgcggtgt ggttcttttg ttcttgctgt 240  
 cgttgcgctc tgtgttaatg cgggatcaa taatagcaat agtgggtactg gcagcgaagt 300  
 gaaccactga tggtttgtgg taggcctgaa tggatgggta taatagtatg gtagtagtat 360  
 aatggcagta tatgcagatt caactactta tatctttc 398

<210> 4647  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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<400> 4647

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attcatgaac aagaggctca ccacaagggt gtgccggcga tggaacgggt tgggcgattg 180  
actatgggta cgacggagat ttagaaggca ctaagtaaac cacacctaca tatgcaaact 240  
aagtgttatt tttgacctca aattgcgtac aaatcaaata ctagcacata tatttcctcc 300  
caaattacta aactcataaa ttaatcacta tacanagcat tgcaagagct aatctagcaa 360  
tgagagatga aaggacaaag ttgctaacct ttgtgatcaa ttgaatggat gggggcctca 420  
natcttgaca aatttt 436

<210> 4648

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-E3

<400> 4648

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tactcttatt attcgcttgg ctatatggga tggtaaactt gagtgactta cctatagtag 180  
acaaatgacg atcaaaacct tgtttaagcc ttagaatggg ataggtattt tttcttcctt 240  
gtacaaggaa gtttttgcca accgtaggtt atacggtgag gatcaacca gaccatttc 300  
ctgcaggaga aaccataaat ggttgaccac catgagatat caatagtgtt ttagtattgg 360  
gccaaaaccc atcagctaag aggaccatt ctcaaaaaaa ccttacctag atgaaggaca 420  
gacgaattgt ggtaaagggt atgccactac cggaaaaccc cggataagga a 471

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<211> 321

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-E4

<400> 4649

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gggttgacca atggcgattc agaccttggg taagccttaa aatgggcca gtaatttttc 180  
ctccttgtag caggaagttt ttgccaaatc gtccgttaaa cgggtaggat taaccagac 240  
ccatttctg catggtaaac cataaatggt tcgacacat gggctatctt tttttgttta 300  
gtactggggc cagacccatc a 321

<210> 4650  
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<212> DNA  
<213> Triticum aestivum  
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tcaacattta ctggaaaaat attcatgctc ataacatgct gttcttaaga ttgactacat 180  
taagagccct tttttatttg actccaactt gatatgatgt tgtaggccgc ctgggtgtccc 240  
tacccttact aatcccagaa actttcaaag aaaagcggcc tggcagttgc aggtggttcc 300  
tggtcgcgat agacgatggc gaatgattga tgatcgttcg cacgtaccgg acgtgttggt 360  
tcgcggaata caatcacaat cactgcaagg tctttgagca agattccagc ttctctgggc 420  
cttcaagaat ttttgac 437

<210> 4651  
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<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-E6  
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ggaaaaatat tcatgctcat aacatgctgt tcttaagatt gactacatta agagcccttt 180

tttatttgac tccaacttga tatgatgttg taggcgcgct ggtgtcccta cccttactaa 240  
 tcccagaaac ttccacagaa aagcggcctg gcagttgcag gtgggttcctg gctcgatgac 300  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-E9  
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 tctagtaaca agaatatgaa atcgtaaata gcgaaaaatt cttgtcttgc gcggtctaag 180  
 tctaaggaaa taaaaaaaaat tcgcttatac aatttcatct acatcgaatt tatatatcag 240  
 aatagcggat agaggcatca ttaaaggagt cagggtctact tactttatgc ttctttccaa 300  
 ttttatgggtg gatttgataa gaaccctttt tgctttcttg ataaataatc gacaaaaaaaa 360  
 gcgttttttt tatataacct gcttggttta ttataattat aacaagtcct atatggaaat 420  
 gcccgcataa gag 433

<210> 4653  
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 <212> DNA  
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 <223> Clone ID: LIB103-062-Q1-E1-F1  
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 ctctccagg aggaggagaa aacaccaggc cactgatcat aaccacaaat ggtgcaattg 180  
 gcgtcttctc agacagcacg gaccttgctt accaacaagc ggtgaaagat ggcgcggata 240  
 taataaattg ctgggtccgg atgtcgaaag acgggggtgc cttctgcctg ggctctacag 300

atctcaacag cagcacgaca agcagccaca acttcttggg 340

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<211> 366  
<212> DNA  
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cggaataaaa tctaacttgg aagttagaaa cggaataaaa atttaaatgt ttacaatatc 180  
ctgaggagag acgagttgct actgccgttt gtgctttcac tagttttgca tgtgtatggg 240  
gggtctgaaca ttgtagatta taccctattc caactacttg ggctgctttg aaaactgcta 300  
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taagac 366

<210> 4655  
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cagattctgc tggtttccct acttggtcca aggtttctcc aacagctggg ataactctgc 300  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-F12  
  
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 gccaaagaaa gattgaacaa atgggaaagg aacaagatgc ctccaataac aaggcaagaa 180  
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 ccaaaat 247

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 <212> DNA  
 <213> Triticum aestivum  
  
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 <400> 4657  
  
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 ccgacggggt ttgggacgtg gtctccaacg aagaggcggg gcagatcgtg gctgacacgc 180  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-F3  
  
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gaagaacaag aggaagaaga agacgaagag gtagaccacg acgaggaaga tgacgacgaa 120  
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<210> 4659  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-062-Q1-E1-F4  
  
<400> 4659

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attcaatctt cggtctgtct ggctgtgcat tgccattgta aattatcgcc atttatactg 300  
ngagctcata gcttcccaca tgcggtgaac cgatgaaatc catccagcaa atgggtctggt 360  
tttcagaaga actcgtttca agatttgt 388

<210> 4660  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB103-062-Q1-E1-F7  
  
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tcgngtga gctggtgacc gatcgccaga agaaaact 398

<210> 4661  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
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 actgttgctt gtaagtaagt actaagatgg aaagatgaat caatccatgt gaatcgtgac 300  
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<210> 4662  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum  
  
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 tgaatgaaat ggtcactgga agcagaactg cccaaatact tggcggataa gaaggatggc 240  
 aaagtgaaca aaagtatata tgatatacat gttattgatg tttactttac tagtgttctt 300  
 agtagcccta gggattttga tataggttcg gttgctatga ttagtaactc gaaac 355

<210> 4663  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-G10

<400> 4663

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ctggatgatg catgttcctt tatctgtaaa atgtgatggt gtgaagttgg tgggggttga 180  
gaattcttca gttgagtttc cttatgcat tcaataagaa catcattgtt tagtgcaccc 240  
aagacctcgc tgtgatcctt ctctgtttgt gctttttttc tccttaaaaa aaaaaaaaaa 300  
taaaagaaaa aaaagcggcc gctct 325

<210> 4664

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-G11

<400> 4664

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cgaccaggag tagtttagga ggatcccagg caggaggcct gcgcctcttt cgatttgtat 120  
cccagtttgt gctagtcttc ttaaggcaaa cttgtttaac ttatgtctgt actcagatat 180  
tgttgcttcc gctgactcgt ctatgatcga gcacttgtat tcgagccctc gagggccctgg 240  
cttgatttat gatgcttgta tgacttattt tattttaga gttgtgttgt gatattctcc 300  
agtgagtcac tgatcttgat cgtacacatt tgcgtgcatg attagtgtac aattgaatcg 360  
ggggcgtcac actatctata cagtatatta tgaacctatc atctgctagc tacccttact 420  
tctggagcct attttttg 438

<210> 4665

<211> 401

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-062-Q1-E1-G12

<400> 4665

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gagatctcaa cacgtcccaa gtcttgctc tatcactgac ttgtgcttca ccgtacatca 180  
ctgtgagccg ccatggagaa gcaccaggca aagtaacatg agcatctatg tgataagcag 240  
agtaacaaaa attttcaatc tttatttcat tattccaaaa aataccgaga ccaccactcc 300  
taccagagct actaacagca natgaattat cataacctag ggtgcttgct aagttttcca 360  
ctctatctct cgggagttga gtttcaacan tacaagcac c 401

<210> 4666  
<211> 247  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-G2  
<400> 4666

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aggatgaagc attacttacc agttggaagc aacaattgga tcgtgatgtt gaaaccctta 120  
aagcaaaatc taacatcggg agaattcgta cgtttttgaa ccgcattgca atcgaatgca 180  
atgaccttga tgaattattc attaaggatc agtcaactgac taatgaaaat gtggccaaaa 240  
ttgtcgg 247

<210> 4667  
<211> 262  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-G3  
<400> 4667

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gcagttggga gcaacaagtg gcttgtgatg ttgaaacca taaagctgga gtctacatcg 120  
gtagcaatcg gacgtttttg aatcgcatg caatogaatg gactgacctt gatgcaatac 180  
tcactacaga tcagtcactg actaatggaa atgtgggcaa gattgtcggg tacgctgtca 240  
atgatcatct taaggaaaaa ta 262

<210> 4668  
 <211> 132  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-G4

<400> 4668

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 ccctggcgcc aagctgatga agatcggcag ccgctccatg tactcaccgg gattcacgtg 120  
 ctactcggcg ta 132

<210> 4669  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-G6

<400> 4669

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 catggaggcg agtcaccgac gagttgcggc accggtggca aacaggcggc agcgagcgtg 180  
 ccacggcagt gcactcatgg tgaaggcgca cgaggtgcgg ctctcactga agctagcggc 240  
 gacggcggca atcgatgtga caagatggca ttggcggcca tctccgtgtt gcaccgacga 300  
 catcgacgac cacgggcttc aagagagaaa taagttaaca agattatgga ggtgaatgtt 360  
 agaactaatc ttgttattag cgctagtttt agat 394

<210> 4670  
 <211> 498  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-G7

<400> 4670

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gtgatgacaa agatccaatc tattaaggaa gagattgaca ggttaaagt ggagatccag 180  
caggccgagc gtgagtatga tctcaatcgt gctgctgaac tgaagtatgg tagtctgaat 240  
gcattgcagc gggaccttca aaaaactgag gatgagctaa atgaatatca aagttctggg 300  
aatccatgc taagagaaga ggtgacccaa gatgatattg cagagattgt gagcaagtgg 360  
acaggtattc cagtttccaa gttaaagcaa tccgacagag aaaagctact gtatcttgag 420  
gacgaactgc acaagcgtgt agtggggcag gatcctgcag tcaaagcagt tgcagaggcc 480  
attcagagat ccagagct 498

<210> 4671  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB103-062-Q1-E1-G8  
<400> 4671

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agcatataaa tcaaagctca ctttaggggg attatttgta ggcaagaaag taaagctctg 120  
aacagagatg tttgtgagga tttgggtgctg gccacactca tctgcgatga agttgggtgag 180  
gccggcatta gaaatatatt gcatgaactc ctcatgaatt ccagcctctt gcaggaatgg 240  
ggtgtgcggc catccgcacg gacgtacctc cgccaacccc cgagggtgga gatcactgtc 300  
agaagactcc ccgataaacac cettggagtt cttcttcgag ccaaacttcc tgaagatatt 360  
catgttcgcg tacaattttt tgaaaataaa aaaatttggg gtgatgaaaa atcgtcaacn 420  
aaactttata agattgatag caactactca tagggata 458

<210> 4672  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-G9  
<400> 4672

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acagccggtg gcgcctcatg tctcatgtgg gccagtccat gtcccatgtc gtactcatcc 120

ttgcgggctc cgattcttca ctttgcgggt ctcacggccg acagacatgg gcacggaagg 180  
gaacaaccaa ggatgggcat caacgaagat tagactaatt ttaccttgc aatgtaattg 240  
tatggatttg atgatttgct agtaatgtcc ctagatgtga aagaggacat ttcggaggag 300  
cctgtggagg ataccaaaga ggatgccgct gtgtgaatcc gccagaaacc tggcgccaac 360  
atttaccaag tcgttgtagc tggagcacca ttgtttggga gctctcgttg tac 413

<210> 4673  
<211> 373  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-H10  
<400> 4673

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ttcgtcggtc aggtcgggcc ttgtttatcc cgtgtcctgc tggccctgaa caaacccaac 120  
agctcgagta acgtgacttt gtactctaataaatagtgtc acggtctctg gaaacaaaac 180  
ttctatttag atggctcagc attttttttt ttgcgaagaa tggctcagca ttcattgacga 240  
atggataaca acttgactgt caatttctgt cacaaactca caacccttgg atgaataaaa 300  
atatcttaaa tgaaatagaa aaataggggg cgcctacttt tcgcgcaact gaaaaagggt 360  
gacctcagcc gat 373

<210> 4674  
<211> 349  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-062-Q1-E1-H12  
<400> 4674

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ccaagcaaaa gtcccaaagg ccacaaaaac caaggacaat ccccgcaaaa caatcaatgc 120  
cgaaaagcca actctcaacc aaccctcgag taaaaacgat cggagctctt gtctcgagcc 180  
aaggtaatgg aggaggcgat gcaactatac aggggaagctt gcgcgggccg cgggaccgaa 240  
ggcttctgt aggttgacgc tttgaactct cctgcctgtg gctgcgtggg aagtcgctcg 300



gtggcgggtgc ctggcacgga aacatgtcct ttgttacctg cacggtgac

349

<210> 4675

<211> 351

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-H2

<400> 4675

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taattcatct atcctgtggt aaaatgtggt ttaaggcttt aaattagggg tggcgccaat 120

taaaaccttt tggaggactt ggggaaattc tttgcaattt ggcggtaaaa aacagaaact 180

ttacggccca caaaatttgc tgccgttttt tacgggaaat tgcaattagg ttgatacctt 240

ttgcagatga ttaatagata aattcctcac gtcaaaaaat ttatttcaga atttttgggg 300

tacgaaagta ttcgaaacct acagattact acagactggt ctgtttttga c 351

<210> 4676

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-062-Q1-E1-H4

<400> 4676

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atgccctcaa ggaatccgtg gacaagcatg gcggctgccc cggcaacaag acggtctatc 180

tatattctgc ccaatgcagc gcggactgca acgaggcatg ctctaaccac tgcgacatgg 240

actgccccta catagccgca agatttgggt acatcatggc tacacctgcc aataagaaag 300

ccatcgacca agacatggaa tgcttcaagc gttgctcaaa ggaaaaggat gccacaaatg 360

acaaatgccg cgttgcatgc aagctggctg cctcgtctcc ttgaaaatgc atactctctc 420

tttttttaac ccatgcttca ttcaactctc cttttttttt ttt 463

<210> 4677

<211> 481

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-H5  
 <400> 4677

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 tggcaagttt gctggtttga gtatgctaga tggcaatgct tttctccaaa taaaacaggt 180  
 gggggacaat gccgagtatg tgttgctgga gatgatgtgt caatgcgcac tctacttgga 240  
 tatcaagtgc aggacactgc atacagtgta tgaggtgaca aacgaggatc gatatttggg 300  
 cgatatacat cctttcatga tgatatggcc tccaaagtcc cctgcgctca aggatgatcc 360  
 tgcaacggca agaaatgcc a tggaagaac aagcctataa ctgggagttg ctggatggta 420  
 tgtacatatg tcagtggtaa gctttggcgg gtgcaatcaa agatgagctg agctgcattt 480  
 c 481

<210> 4678  
 <211> 486  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-062-Q1-E1-H6  
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 tttctcgtcg caaacatttt ccagaccggg aacttggtggg cggggggcgc agagatagag 180  
 taccacacgc atcacatgcc cctgtggaaa ttgcaagtag caaaaaagga aaaaagaaga 240  
 taagagccga gccccgcccg gtcaagaaaa aaagagcctg ccggatgcag caaccgaccc 300  
 gaggtggcc gactattttg ccccggcata tgctcgtcgt ctgatgctct cgaatctctg 360  
 gattatttgc ggaatatcct ttgccatcat taaacaccgt cgaaagagac aagcaagcga 420  
 gctcgtctct gatcacaacc agctcgccca aggggcgaaa cgcactacta gtctgtctaca 480  
 gtacat 486

<210> 4679  
 <211> 492  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-062-Q1-E1-H7

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 gggaaccttc tagaagggtc caaccggttt tctgtttct tttttttcc tttttagtgt 180  
 ttctgtttat tctctgttt cttttttatt tatttttctt tatgctgttt cttcatttcc 240  
 tcttttcttt tatttttgcc ttttttcctt tttcatgttg atttcatgtt gatatttgtc 300  
 ttttttctaa aattaaaaaa atcagatttt aaaataagct ccactctatt aaatatgttc 360  
 ataaatccga aaaattgtta atgtaaattt gttcacaat ttagaaaatg ttcataattc 420  
 anaaatactt ctggaatttt aaaaaatgtt cacggttgca aaatttggtc cgtgattcaa 480  
 aaaatgttcc cg 492

<210> 4680  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-H8

<400> 4680  
  
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 gatccgccgc ccagggccat acggctgcga cgggtgcgaa gagatgggca cctcctggtc 120  
 ctacaactgc gcggagtgcg acttcgatct gcacgccaaag tgcgcgctgg gtgaggagaa 180  
 gaagggagag gaggtgaatg ggcaggagca tgccgctgcc ccagctgggt acgtgtgcga 240  
 gggagacgtc tgcaggaagg cctaggtagc gttagcgttg tgtgtgttcc ttgccagctg 300  
 aagcgtgtct gaatcatgtc ctgtgtggtg tgatgataaa taaatcttgc atccgatgat 360  
 ttggcttggg aagtatttgt cgtggtgaca tttatgtgca ag 402

<210> 4681

<211> 434  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-062-Q1-E1-H9  
  
 <400> 4681

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tcatgatgga tgatgagacc gaggatgatg atgaagatgc tgaaggggac ggagaggggtg  180
acgaggaaga atatgacgtg aaccatgctt ccgccgatgt tgatgatgag atggacgagg   240
atgatgatat aggtgatgat ggggatgatg gtggtgatgg agttgaggtg aatgcagatg   300
aagatgaagg cgcgacctca tactcgtcag agtacagtga ataagagctt ctgtctccgg   360
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 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-A1  
  
 <400> 4682

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ccattgaact gccagggggg aatgagcttt aatgctggtt gtgttggtgca cgggtgaaac  180
gtttggtgtg gatatttacc gtaggcattg ttttgtacca ggtgccttgg taattgtcct  240
ggtgtggaat ggatggtttg gaattttgga acggccatgt aagcgtgtaa tcctaattag  300
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<210> 4683  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 4683

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tatggaacaa ctttgggggtt taaggagttt ggatgcacaa gcagtattct cgcttagtac 180  
aggtgaaggc tagcaaaaga ctgggaagcg accaactgag agagtgacaa cagtcgtaaa 240  
catgcattaa aattaatttg caccaaatac aagcatgagt aggatataat ctacatgaa 300  
cataaatatc atgaaggcta tggtgatttg attcaactac atgcgtgaac atgtgccana 360  
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<210> 4684  
<211> 456  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-A12

<400> 4684

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attagaatac tctatgtgct tcacttgtat cttttgagct aggcaatttt gctctagcgc 180  
ttcgcttata tcttttagag cacaatagtg gtttttagttt gttgaaatta ttgaactctc 240  
atgcttcact tatatcattt tgagaatctt tttaaacaac acagtaattt gcttttggtta 300  
taaatttagt cctattatga tagacatcca agagggatat aagaaaaact ttcataatac 360  
gtgcattgaa ttccatgaga actttgattc cttataattg ttttgagata taaagatggg 420  
gatattagag tcatgctagt gagtaattgt gaattg 456

<210> 4685  
<211> 239  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-A2

<400> 4685

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 caacaacggg gaacttgtgt gatcctccgg tctgcccgt acggtgtaca aaaatttctt 180  
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<210> 4686  
 <211> 314  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 4686

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 atggtaaccc attaaatccc ggaacaataa gtgggtccat taaaatgaga aatagggtta 180  
 agggcatggc cccatgggca atgggttatt cctaataat ctcgaacgta ntgttacaca 240  
 tattcatagt gtgaatacca aaagatgtaa agttgataac gatagtccca cataactgtg 300  
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<210> 4687  
 <211> 295  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB103-063-Q1-E1-A5  
 <400> 4687

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 tgttgaaact ccaatgccgg taaaatggct tcgcgccttc agaaatgata tgaactcagt 180  
 tatacggacc atgcttacat tcttgaccg ctagttacag cgtcatgagc aaagatatca 240  
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<210> 4688  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-A6  
  
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 gctatagccg gctattttaa actatgatta gagagtgatg ttattttctt cctatgttgt 180  
 acaagccaga aacgttttgt gaacggaaac accatcatgg cctttaataa agctacaatt 240  
 gaatctttac cattgttttt ctgtaggcat ttgtttgctc tgcttaaaac tgtaaaagg 300  
 ttaggttga ctgcagttca tttgggctga ggaaatccat gc 342

<210> 4689  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-A7  
  
 <400> 4689  
  
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 atccaaacta caggccggcg cggacgcgag ctagatggct ttggaaaccg aagcgggtggc 120  
 gtgctcgtga tcccctccca tgcgtgtttg aggagcgtga atccaggggc agcatacgcg 180  
 gcgagatccc atcctaggcg tccttccgtg gtggaagatg atggctggta gtggatctgg 240  
 tggatcctag cctaataagc tcgaagccgt gatgttgtac tctgctttca tatgaatacg 300  
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<210> 4690  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-A9  
  
 <400> 4690  
  
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ctctctagat cggctatgga gtttggagga tgtgtatatg gatttggcgg cgagcgctgc 120  
cgatgcggcc aagtacttcc agggtcagac ggaccatgaa gtggaccatc tattttggac 180  
acaattccat tctcccagac gtccgctttc attgattgac caattatccg aatgggcccga 240  
actgaatagg ttgtccggac ttgccatgag gtctgttggt gatcagctat ggccggaaag 300  
gccaaaactg aacagctatt ttagcttggg gcatcagctc cttgacgtgg tgccgcgcac 360  
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<210> 4691  
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<223> Clone ID: LIB103-063-Q1-E1-B1  
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accttcggcc ttgcccttgg tcctggcttc ccttggccgg ttgtaatcca atggaggctt 180  
aacggcccca atttctccaa cggctggcaa ggccttgcgg caacggaagc ctcaaacggc 240  
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cggctccgcg tcttcccct 319

<210> 4692  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-063-Q1-E1-B1  
<400> 4692

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cgcaagggtc cgctcttggg ttcaactgagt gtttgccaac cacatcggat ttgcaacctc 180  
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<210> 4693  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-B12

<400> 4693

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 aagatgtgcy acatgtagag gatcttaatc ccaggtagct aagatgggtgc cctgtatata 180  
 caggcgggctg attgtccggg gtcaagccgg acttatgaat atgccgaaat gaaacagcaa 240  
 cttgacgagg cagaaaccga catcgcgctg gttaaccaac ggcttgatga ggctcaagggt 300  
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<210> 4694  
 <211> 306  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-B3

<400> 4694

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 cacggtgttg aagcagggtgc acccggtact gggaatctcc tcaaaggcaa tgtcaatcat 180  
 gaacccttc atcaacaaca tcttcaaaaa cctcgccggg gattcggcca atctggcccg 240  
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<210> 4695  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-B4

<400> 4695

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cttcccttcc aagtgggcag gttgagtcg gcttaatacc agagggccca tttgcgctcg 180  
atggagaata tgggtgttta cagcacctcg agcagttaat aaagaacaag ggattctgtg 240  
tggtttgtgt tgctgaagct gcaggacaag agttactgca aaactcaggt gcaactgatg 300  
catcaggaaa tgcaatactt aacgacattg gtgttcacat gcaacaaaag atcaagacgc 360  
atttcaaggg catcgggtgc catgctgata taaaatacat cgacccgacg taaatgggtcc 420  
gggcttgtcg tgccaatgca tccgatgc 448

<210> 4696

<211> 341

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-B5

<400> 4696

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tgccctacac atgttaggat ctacctcata tatgcatctt gatctactgt gtgctcgata 180  
gatgatcggg tctagctcct atatgcacat gttatttacc ttcactttgt cagatcgcat 240  
gacttgtttt atcactgcta tactagtcac gatttatcta gtaattctgt tatcatgatc 300  
actcgataaa attgctcata tttccaacat actcactccg t 341

<210> 4697

<211> 170

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-B8

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gcgtacttcg gttgggttca tcgagtatac agccgtgtca cagaacccga tcctgatcat 120  
 tgctgctttc atcttatgtt cgcaatatcc agattgcact cctacattct 170

<210> 4698  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-B9  
 <400> 4698

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 gtactagtac actacagtct cagatgatga taacgcgaca gatatggact gtgctttag 180  
 taacaaaata tgggtgctgg ggctgcactt aagctttacg agagtacgac tgaccctata 240  
 tgatgcaggt gtgctctctt cgaaaatata ttgtctctc caatgctttt gggatggatg 300  
 ggaacatccg gggccagtgg tgctgcctca tcgcgtttgg ctgcttccca cacttggcta 360  
 tctccatgac cctgtttcaa gaatggggat gtacctagtc agaagtcac 409

<210> 4699  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-C11  
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 atgtcaagaa caaggatata aggaagttct tggacggcat ctacgtcagc gacaagggcg 180  
 ccatcaagga ggagtagaga gccggaaacc gtcccgccca ccagaagccg tgtttctgcc 240  
 tgccgtgttt gtttcatcgt gtttgtgtct gtctgtcgtc gtcgtcttcg tgattttgaa 300  
 ctttctctag actgaatttt gtagcggagt taaattttta gggatgtgcc gtggaacatg 360  
 ctatctttat tgttatactg cgtatcgtcg ccgccgcgag aaccgggtgcg acgcttatct 420  
 agccct 426

<210> 4700  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 4700

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cagatactaa agacagttct aagctccgca ttactgctga tgataaaaga gaagatttca 180
aagttcactt ggatctcgct gcttgcgctg cggcgatacc tctttgtttc tcggaagaga 240
atcaagagtg cataattgta ttatatatct cagacctgag aaaaccagtc taatcgacca 300
ctggtatttc aagatctcat actaccaa atacagaagta cagaagcgga acaacacgat 360
tatcttgaga gcgccatgga atgttctgaa taaatttact tggntttttc 410
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<210> 4701  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-C3

<400> 4701

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agggcacaaa ggccttcaca aatttaacct ctcccaaggc ttaacctccg tttctcaacc 180
cgttggattc ggtaggtatt aacctgcagg attgtgtcct gaatgtgtaa ccttgtgctg 240
ctggtgggtc tgaagaaata ttcattgggac tgcttaata a 281
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<210> 4702  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-C4

<400> 4702

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ttgctgcaat tcaatgctaa aaatgtgaaa agccgagcct tcaagaaagg aaatttggcc 180  
ctccgagtgg ttcaacagaa accacacaaa cttgccccaa cttgggaagg tcccttcac 240  
gtcaccagag tcctccacaa tggagcatat cacctctaca aggttgatcg ccagatcgac 300  
gagccacgag cttggaatgc ggaactattc cgcccccttt aaacttgagt tctcccttgg 360  
acgggatgt 369

<210> 4703

<211> 476

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-063-Q1-E1-C5

<400> 4703

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atgctgacgt attggcatgt ggccacgtca gaatgttgca catacctgga caccaggggc 180  
ttattacaaa gggcactgtt tatgcccgat ttacgccata nagaccgaat accttaagga 240  
gtgttcggcg ttgcgagttt ggccttatat gcatcagctc cgaatcatgt cattgggtcaa 300  
attttgggtt tgcccggatc ctgtgttttg ctaccttatg ttccactcta ttggctaagg 360  
cggcaccagg agaactactg ccaatgttgc ctggttcatt tcgacgagca cctcagtaga 420  
aaaaaccgaa aactgactgt catgatatag cgtgagacta gtcaaact cgatga 476

<210> 4704

<211> 325

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-C7

<400> 4704

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cctttcctcc actcgcgctt cgctctcaga tcccttctcc tccgtctcgc ccgcgtgttg 120  
 gggtaggagc catggcggac cagctcaccg acgaccagat cgccgagttc aaggaggcct 180  
 tcagcctctt cgacaaggac ggagacggct gcacaccac caaggagctt ggaactgtga 240  
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 atgctgatgg caatggaccg attga 325

<210> 4705  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-C9  
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 tgagactgtt tcgctcttgg tagcactgaa ggttcgccac ccacatcgga ttacaatcct 180  
 ccgcggaaac catgatagtc ggcagatcac acaagtatat ggattctact atgaatgcct 240  
 acgaaagtac ggcaatgcaa atgtatggaa gatattcaca gatctttttg attatttccc 300  
 attaacagcc ctggtggaat ctgaaatctt ctgcttgcac tgtggtttat ctccatcgag 360  
 tgagaatctt gatagtgtgc g 381

<210> 4706  
 <211> 440  
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 cgagacatgg cggaggagaa tgccccagtt gaggttgctg ctccggttgc ggccccctacc 180  
 ccagttcttg gagagcccat ggacttgatg actgctctgc agcttgtgat gaagaagtca 240  
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gctgctcaga tctgtgtgct tgctgaggac tgcgaccagc ctgattacgt gaagctggtg 360  
aaggcactgt gtgctgagca caatgttcac ttggtcactg tgccctagtgc caagactctt 420  
ggcgagtggg ctgggctttg 440

<210> 4707  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-063-Q1-E1-D11  
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agggagctgg acatgctgga gatgtgccac cccgatggccg agcaaacggc caccgtctcc 180  
gtcccgetgc tcctctcccg gctgtaaaca gtcgccccct aaactaccta cctattgtcg 240  
cggcaggttc gccggccgtt cattccagtg attgctcgga gaaggcagcg tgggagcaat 300  
ctatccttgc tcttctctgt ggcatgaggc gtgtggtcgt gtgaccctgt ggtttgctga 360  
ataaaattac tgctgggtaa taaaagattg tgggcgtctg gtatgtatac tgtcagcgtg 420  
atgcgggggt t 431

<210> 4708  
<211> 129  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB103-063-Q1-E1-D2  
<400> 4708

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ggccaaaaag aaaaaaaga aaaaaaggc ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaccggccg 129

<210> 4709  
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<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-D4

<400> 4709

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aggtggaaag gccttcccca atgaagaaag gtgcaaagga aaaatttaaa ccgaaaaaca 180  
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<210> 4710

<211> 470

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-063-Q1-E1-D6

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at ttgatatg tgggtggacc gtgcttaggt gttgttctta cttgaacaag cctectactt 180  
atgattaacc ctcccgcaag catccgcaac tacgagaaaa gtattatgaa taaattcaaa 240  
ccatagcatt aaactctagg atccaatcgg tcccttatgg aatagtgcac aaactggggg 300  
ttaagtttct gtcactcag taaccaccca tctatttact attccacaat gcattccctt 360  
acgccc aaat atggtgaagt gtcatgtaat cgatgttcag atgacaccac taagggaatc 420  
acaacataca tactatcaaa acaatcaaca catatcagac tcacattaat 470

<210> 4711

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-D7

<400> 4711

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tcctgaacta ccaacgcggc tgtaaattctc tgccatcgcc gtccgcgttc ttctcatcg 180  
 caacatcgtg cccctccgca atatttgccc agtgggttct aaggtcaaag accagagtat 240  
 aaaataaaagg tgggttactg ttaatatctc atacaatgga gtccttggtg aagctgtcct 300  
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 cagcgtctcg tgctc 375

<210> 4712  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-D8  
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 catcctactc cctcgccctag ggactcctcg ggtatagaga cgacccacgc atcgggtgcag 180  
 acgagtccca tcaegtcttc acctcttccc gtgcaacacc agcctgctcc acctccacca 240  
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 atcatcgatg gaggtccaac ccgtctgcct cggaccttct actctccggc cattgcacct 360  
 gagcgccgac acgagtagtt cgccattggc tttgtcgagc ctccgccgcc acctggacag 420  
 attcatccct tctattaact ggtagtgat tttgtgatga cccagctgca ccgtgacg 478

<210> 4713  
 <211> 109  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-E1  
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<210> 4714  
 <211> 431  
 <212> DNA



<400> 4716

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gacagttag taaaactgaa aaaagataac agaggaagac agatgttgta gtaaggtgcc 120  
caaccaacca aaaggcacca aaagaccttt taattttttg caaaaaggca ccaaaggaat 180  
tattacagga gaaaccatgg aatatagacc aaatgttata cctaaccaaa ccaaattgga 240  
aaagccccag gatgtgtacg ggtaatgaaa tcaagggccc tcaatgcaat tatcaccatc 300  
ccaatatggc accactgtat tcaagccaaa ggtgagttga aaatacaaaa agggaattcc 360  
aaaaaaaaaa aaattaattt tt 382

<210> 4717

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-E5

<400> 4717

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gtgatggta tattgttgaa ttcattcatg atgctactga aaattattat gagggaggaa 180  
tatatgcttg taggagttgc aataatatca agtttcctct ctacatgttg aaaatcttga 240  
agtgttgctt gctttacctc ctatgcaagt tgattcttgt tcacataagt tgtttgctca 300  
caaaatccct attcatagga agtggggttag acttaaagt gctagtcata ttcttcatga 360  
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<210> 4718

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-E6

<400> 4718

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ataggcctct actggaccag tacaatgaaa tcggtgggca tcccgacaag agacagcggg 180  
tctgcgacaa tgccgagctg ccaaaggccc tgcagcgggt tgccaagaac aagcaatcat 240  
gatcttggtt atctagcagt ttgtgctgta ctatcatcta tcatgtatct ggcaggtagt 300  
atttgagtcc atgtggacat gccacatgag acatcgggtg gaaaggatgc aacaaatttt 360  
tgtctcgaaa taacttgatg ttctagttga tatttagctc ataaatcaac atg 413

<210> 4719  
<211> 343  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-E7

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gaccattgct gctgctgtag gttagggaga aggctcgagg cagccaagaa ttccgtcctg 120  
cactacttca acaccgacct attctagcat gaatcttctg ccgtgaggat ttgatgcagc 180  
aagggccatt tgtttgacag aaacagagtg gttaccgcaa gagaggtaca aatcaaggac 240  
cgaggaggga cgaggcggc tttgatctaa gttgggtcac tttctatgaa tagatgatgt 300  
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<210> 4720  
<211> 392  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-E9

<400> 4720

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ctacacctga taggaaagga catattgcgg tttcatgcaa tttattggcc aacaatgtta 120  
atgtcagcag ggataagcgt tcctgatgca gtttttggcc atggaatctt gacagaggat 180  
ggcatgattc tgggaaactc attaaagcaac atacttgta catatgatct ggtaggcaaa 240  
tttgatccgg atgcgattca ggactacttc ctgcaagcat cataccatgt gaatgatggg 300  
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aaccttctga atcgattact tggactccta ca

392

<210> 4721

<211> 171

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-F1

<400> 4721

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aggcgacctc ccggactcca ggcgcaaagg ggataaaacc cccaagggtc ccgagtcggg 120

ccttgaccgg gaaaccttgc cggaacctca aagggtcccg gatccaatta g 171

<210> 4722

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-F12

<400> 4722

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ctataacccc gcaccactct ttcttacacc agatggccat ggacagcgac ggcggcctca 180

gcatgccagc gaggatcaga ccatcgacaa gccctccgtc gcggtgggcc atgtcaggag 240

aatcaccata gatggaagaa acagctggat acttggggct gtacaaggag ggtatgactg 300

tcaaactgat acggggagct tagttttag tgggggtcaaa gaaccattc atttgcagtg 360

tattcagccc aagta 375

<210> 4723

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-F2

<400> 4723

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aaggaaggag gcgcgcaccc cccctctggt ccgaattgga caaggggtgc agcccccttt 120  
 tccttctccc tctccccctc ctctcttctc tctactcaa acaaggaaag gaggagtctt 180  
 actcccgggtg ggattaggac tcccccttg gcgtgccctc ctcttggtc ggccgcctcc 240  
 ccccttgctc ctttatatac gggggcaagg gagcacccca tagacacaac aattgatcat 300  
 tgatctctta accgtgtgcg gtgccccctt ccgcatatt acacctgat aatatcgtaa 360  
 cgggtgcttaa gcgaaaaccc tg 382

<210> 4724  
 <211> 482  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-F6  
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 agtgaaaatg ttaccaatat ttagggcttg atgagacgaa gaagtgggct ttggattcac 180  
 cttaaaccga gttgcgcgca agaagttgtg atagtttttc tgccagggtc ctatctgtga 240  
 aatgttttct gcaacaagc ccctgactga gaaaactgaa aacgcattcg ggaataatac 300  
 gctttctgcg taagaaaaca tactttctgc cgtagtacat caaaaatatg cttttcagtg 360  
 aggaaaacac atttgcttct gaagaacaac tgaaatgcgc ttttaggagg gagagacgta 420  
 tcttacggag tacgcttcca cttaaagac gtggcagtggt cggggccgct tcctgtctgg 480  
 ct 482

<210> 4725  
 <211> 198  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-F7  
 <400> 4725

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 catcatattt gtggcaaagc caccaggctt aatttttcat acatgtcact cttgattcat 120

tgcacatccc agtacatcgc tggaggggatt catatacatt catatcatgt tctagttccg 180  
agttgtcatt cacgagtt 198

<210> 4726  
<211> 482  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-F8

<400> 4726

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aaaaacacat tatctgagaa tacgctttca gaactgagaa atcatatttt gggctgaagt 120  
gtaaagaaaa tacgctttct ccaaagact acgtatttga ccaaaaacca tcttgatctt 180  
ggcaatctcc agcaagcctt ggccagtagg gacgctacca ctgtctgtgc ataagtgagg 240  
gtataaaata cccatgtttt gtacactgac aggagcccca tacacattgt cgaagcatcg 300  
ttgggctagg cccaacaat gacacaaatg tggcaggaaa ctaatgttgc aattttagtc 360  
atgatgattt ttctgacgca cgtccagtc actcattaaa tgtgggtcgt tggaacttgg 420  
actattgtgg ttattccacg gtagtgcgcc tgtaaaagag cttgccgagg taagtgatac 480  
at 482

<210> 4727  
<211> 89  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G1

<400> 4727

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tcttgacatg ctctagcac accttgggc 89

<210> 4728  
<211> 405  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G2

<400> 4728

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cttagattat tttgaaagtc cttaaaagca tggtaatttg cttaaagtct aaaaaggctt 120  
ggaaaataag attaataata aaactttctt atgagtgtgt tgaatactat gataagtttg 180  
atacttgata attgttttga gatataaaga tggatgattt aaagttgtgc tagttgagta 240  
gttgtgaatt tgagaaatac ttgtgttgaa gtttgtgatt cccgtagcat gcacgtatgg 300  
tgaaccgtta tgtgatgaag tcagagcatg ctttattttt tgattgcctt ccttatgagt 360  
ggcggtcggg gacgagcgat ggtcttttcc taccaatcta tcccc 405

<210> 4729

<211> 215

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G4

<400> 4729

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aggggaagac gaggggcacg aagaaggcca gcaaggccaa gaagggcgtg gagacgtaca 120  
agatctacat cttcaagggt ctcaagcagg tgcaccgga catcgcatc tcctccaagg 180  
ccatgtccat catgaactcc ttoatcaacg acatc 215

<210> 4730

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G5

<400> 4730

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gagaactgtg ctatccatta tgcctataat caaatattag ttcttatgta gttccatcac 120  
atcatataca ccaggtttct caagctctac agttagtgct ttatgaaaga ttgccagtga 180  
cactaaggtc agggatttga ggtccctgca gacatctact cgatctactt caagtttcga 240  
ttgtacacat tcgttgagtc attcatcgga attatcatgc tcttctctaa tatcactacg 300



atctaccata tcttctaaga ctactocaga actgttttagc actgagactg aata

354

<210> 4731

<211> 476

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G6

<400> 4731

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cgagtccaag gccgactccg gcgcctccaa gacctaccgc cagcaggctg gcgccatccg 180  
caagggtgga cacatcgta tcaaggcccc tccctgcaag gttgttgagg tctccacctc 240  
caagactggg aagcatggtc acgcaaagtg tcaacttggt gccattgaca tctttaatgg 300  
aaagaagctt gaggatatcg ttccttcctc ccacaactgt gacgtccccc atgttgaccg 360  
ccaagattat cagctgattg acataactga tgatggatat gtcagccttc tcaactgagag 420  
tggttaacact aaggatgacc tgaagcttcc cactgatgat gttctgcttg gccaga 476

<210> 4732

<211> 486

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-G7

<400> 4732

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gtgggtgcat tcatacataa ggagaaaggg cttgcccctt acagttgttc tcggcactgc 180  
gctggtggac ttctatgcaa agtgtggatg cattgaagat gcagtcaagg catttgagtc 240  
gatgcctgtg aggaattctt ggacgtggac agccttgata aagggcattg caagcaacgg 300  
aagaggcaga gaagcgctgg agctcttctc ttccatgcgg gaggccaata ttgagcctac 360  
agatgtcaca ttcatgttg ttctcctagc ttgcagccac aactgcttag ttgaggaagg 420  
tcgccggcat tttgatagta tgaccagga ttatggcatc catccaagga ttgagcacta 480

tggtctg

486

<210> 4733  
<211> 480  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-063-Q1-E1-G8  
  
<400> 4733

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gagcccatcc ccgtttcaga aaccggttcc tcgtcgtcgc acgaagaagc cggacgaaac 120  
ccgctcgaag agaaacgagg accgtaccgc taagaggagc aggagcaagt gaccactcgt 180  
gttggatgat tcgttttagtg caactagttg tgagcaagaa cttgtatgct atgctagtga 240  
tgtctatttg gtactttcaa gctttgttgg tgatgtcgaa ttgctacttt caaactatgt 300  
tcaaattatt tgaaatgtta atttgctatc tacaatgtat gcgatcatcc tattttgaat 360  
tacaacaat atttgttggt atgttttttt ttgattgat aagaccaaga accaatttag 420  
aagttaactg gcacatacc tactgccgga cggcacggag gtaggtgtag acagcctacc 480

<210> 4734  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-063-Q1-E1-G9  
  
<400> 4734

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atgctggtaa accggaattg agatcttcat ctcatattc gggttacata aaccagaagc 120  
atacttgaag gcttgtaagt atgcaatcat ggttacatca aagacataat tgagggccag 180  
tctttagtga ctttggttca tattccgggt tatatatata aggtctatga ttcccgggtgc 240  
ggtaagccgc ctagaggctt gtgacttggt ttctatgcag gatgggttaa gacagctatt 300  
cgagcttaag gaaaataact aatcaattat aaccggagg aataagaaga agaagcttca 360  
atggagttaa gcattcaaca cgtgcacgac ggcacgaaaa aattaagtgt ttatcctact 420  
gtattacaag actccctgag tccaa 445

<210> 4735  
 <211> 320  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-H1  
  
 <400> 4735

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ggcccaactg cacattttta gttatccaag ctcgttctgc ggaaggatat aaagaaccat   120
gggaacccta caagtcataa cccaaatttg gtgttgaaca attttacaac gtgccttggg   180
aatcctgttg ggaggatgat acaatctctt tcccccaag acccaaattt ccgtaggcgc   240
caatttgtaa ccttcaacat tcagcgagac tataaatttt tccgtcatca aaggtaacac   300
tttgaggaaa aagaaaagaa                                     320
  
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<210> 4736  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-H10  
  
 <400> 4736

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tgggcgctat acgccgcgcg tacgtacgtt tggagaactc gatttgtttg ttgtgtttgt   120
cgcttaatta cgtcgttagg tccatctctg tcggtcggtc gtgttaagtt cttggttatc   180
tgtagtagtg gtgcatgttc ttgaggcata tgaataatgc tagatgtacg tgtcagcttg   240
tgccgtggta tgcaatgatg aaatgaatga agtattattg taacataacc aacataacc   300
aaaatacatc atagaaaata gaccataaca gtaataaaaa aaatcagaca aataagttta   360
tagacagaca gaaaaaaaaa aacaggccgc ataaaaaaaaa gcgggcccccc ca         412
  
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<210> 4737  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB103-063-Q1-E1-H12

<400> 4737

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 acgcgacatc tcctagaagc cagcttcgcg gagcaaaca cccctgtagt gcaaaaacga 180  
 gaggcaggtc gaatgcaact tcaaaaatcg aaagaggcgg agttggacgt aattacttga 240  
 tatgccactg ccaagtgact ctagggcacc gtaccggttc aatcaatgtg tttatctccc 300  
 cgatacattc tctcccatc gagaaaccac tctaattggc ttcacgcttg cttactgggc 360  
 tgccggccga cgcagacgag agcaggagca gccgcggtg ccgaacgcat cactagctcc 420  
 aacaa 425

<210> 4738

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-H3

<400> 4738

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 atccggttgt tcgacgtttg tgattgatgt caatattctt aaaagggaac tcttgggttg 120  
 catatggaat agttgtcatg tctttctcgg actattcttt tgcttgataa gggatctgtc 180  
 cgaattcagc tgactgtcta aaaattgcac tggtttatca catattaatg tcgatcttta 240  
 ccaaaatatt agtccttaga agttaagggg gagttttcgg tgaaacattg tggaaagtcc 300  
 gatttgatta tatggctgag actgttcagg gttgtggcca ctcaagataa ctcacacctg 360  
 tgcaatgcc a tccccgtaat ggacagagct ttgggggaat aattcggaat tc 412

<210> 4739

<211> 147

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-063-Q1-E1-H4

<400> 4739

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aaactcaacc gctcttggtc ccatttttgg gtcaagctag ggaggcgctc gacacagcga 120  
acaaggcaac cggacttata atgcttg 147

<210> 4740  
<211> 491  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-063-Q1-E1-H5  
  
<400> 4740

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gagggccttg ttgagtctga agactttgtc aggattcttt ggatcttcaa aacctggggg 120  
ttgagcaaca tatacttctt cctcaagctt accattgagg aatgcacttt tcacatccat 180  
ttgatataaa gtgatatcat gatggtagt ataagcaagt aatatgcgaa tagcctcaag 240  
tctagcaaca ggtgcaaaag tttcatcgaa atcaattcct tcaacctgtg ttagccttg 300  
agctacaagc catgccttat tcctcaccac aaggccgttt tcatattgct tgttgcggtg 360  
gaatcaactt tgtgccaatg atattgtgct tgagaagatc tggacgtttg accagttccc 420  
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ccagaaatgc t 491

<210> 4741  
<211> 467  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB103-063-Q1-E1-H6  
  
<400> 4741

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ttctactact attttctcgc ggttgatgag agagactcgg aagtgaattt gtataccgga 120  
agatttttgt cagccgtgca actcgttgcg cctcttgata gaaaaagtag aaattttgtc 180  
aaagtcattc tatatgctta gcagcagaga tgatgtacga taccattaaa aacccttctg 240  
aatgtttgtt gatgctgtgt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360

aaaaaaaaa aaaaaaaaaa aaagggccgc ccaaagggtt caaagttaa aaaaaacggg 420  
 ggggcccta aagggtcccc ctaaagggtt cccgaaattc aattcaa 467

<210> 4742  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-H7  
 <400> 4742

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 ccatgaaatt atcaagcaat ttggcataat catatccgat actgttctctg ataacaaga 180  
 cgcagggtct gatgacgatc atgacgatga tgaagatgag gatgatgaaa ctggtgatgc 240  
 tcatgatgat gatgccgatg ctggagagga cttctcgggt gaacactgcg atgacgatga 300  
 cgaggatgat gaccctgacg ctaactgtga tgatgctgga gcggggagcc atgatgatga 360  
 tggtgactac 370

<210> 4743  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB103-063-Q1-E1-H8  
 <400> 4743

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 ttgctttgat aacttctaga tttttgcaat aagtatatga gttctttatg actaatgttg 120  
 agtccatgga ttatacgcac tctcaccctt ccacctttgc tagcctctct aataccgcgc 180  
 acttttcgcc ggtatcatat accctaccata taccttctctc aaaacagcca ccatacctac 240  
 ctattatagc atttccatag ccattccgag atatattgcc atgcaacttt ccaccatcta 300  
 gttcatcatg acacattcat cattgtcata ttgcttagca tgatcatgta gttgacataa 360  
 gtattttgtgg caaagccacc gttcataatt tcttcatact tgctactctt gattcattgc 420  
 atatcccgtt acaacgccgg aggcacccat at 452

<210> 4744  
 <211> 375  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-001-Q1-E1-A11  
  
 <400> 4744

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gatgaaaaga aacccgatat cacgaaacga ccacacactc ctattggaga tgaggtggaa  120
tgcaagaagc caaagatagc agaaggctca aggtgccaaag gagaagaacc tgaggctgga  180
gggataaaga attcctcctg ggtctgatga caggggaatg cagtaaacac cagaagcatc  240
aaaactatga tctggaacag tctcctgaat aaactatctt ctggattatg aatgaattct  300
gaagcatggg gctataagtg aattatgtaa catggatttg taactatggg ggatgttaag  360
ttaacgttct atcag                                     375
  
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<210> 4745  
 <211> 312  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E1-A9  
  
 <400> 4745

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caataaatca gggagcggtt ggggtggccta cagtgcgtac gtttcggata ttgatttctt  120
cgtggagtct agtggttcgt cgtgtgtggt tgggtgtagt tgtttggttt tgtagtggtg  180
agtgcgctcg gggtgccgtg tactcctgtg tgtgtgtcaa gtgttgccac ctgcgattcc  240
attttcattc cgtgcatga ataaattaag aaggggtctt ctggacgcgt ctagcgggcg  300
cacggccgcc ta                                     312
  
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<210> 4746  
 <211> 428  
 <212> DNA  
 <213> *Triticum aestivum*

<223> unsure at all n locations  
<223> Clone ID: LIB104-001-Q1-E1-D10

<400> 4746

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ctctttcgat ctgtatccca gtttgtgcta gccttcttaa ggcaaacttg ttttaacttat 180  
gtctgtactc agatattggt gcttccgctg actcgtctat gatcgagcac ttgtattcga 240  
gccctcgagg cccctggcct gtattatgat gcttgtatga cttatattatg ttttagagtt 300  
gtgttgtgat atcttcccggt gagtcctga tcttgatcgt acacgtttgc gtgcctgatt 360  
agtgtacgat tgaatcgggg gcgtcacaag ttggtatcag agccgactgc ctgtaggaat 420  
cccccttc 428

<210> 4747  
<211> 399  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E1-E10

<400> 4747

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gcgaacacaa atcatatcaa catgatgaaa gtgactggat gaaatgcccg tgtaccctca 180  
agaacgcttt gcgtaatgta agagatcgtt ttggcctgtc ccttgctca aaaggattgg 240  
gctaccttgc tgcacgtctg ttacgagtaa cagtacgtgc tcgtgacaaa atatcttgct 300  
atcgaaccac gatgttaccg acaacttcag cacttgcata cattcccttg ctgaagacca 360  
cgtgtcacta ccgtttgctc ctactgggt tccacactc 399

<210> 4748  
<211> 454  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E1-F10

<400> 4748



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 tagcatatca aattgttcac ctggatatgc acttcatttc attccattgt accatattca 180  
 tttgaggtca tcttgatgcc ctaaagtctg ttgcaagagt gctatgtaat gttagtttca 240  
 gattcttacc agattatcga catttggtcat ttttgccatg tttaatgatg aggacatgac 300  
 taccttggat atgacaaaaa atattgcata tatgcatatt tgtcaggtga tttctagtgc 360  
 aaactattca ataatttatt tatgttatcc agaacaaaaa tacttcacac acttttgtgt 420  
 tttgtctaatt tgcaggtgta tgggacattt gtac 454

<210> 4749  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E1-F11  
 <400> 4749

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 tccgtgttgg gcgtgtagca taccaaattg ttcactctga gatgcacggc agttcgggtcc 180  
 attgtaccag attcatttga ggtcagcttg atgtcctaga tgcgtgttcca agagtgttac 240  
 gtggcgtcat tttcatattc ttaccagagt aacgacatat tgtcacttct gccatgttta 300  
 ctgacgatga catgacgaac ttggatataa tcacacatag ggcatatcat catatttgcc 360  
 acgtgatttc tagtgacacac tatt 384

<210> 4750  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E1-F9  
 <400> 4750

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aattatgctt ctaatgccta tgttaaacca tatattgaga aattcaacgc tgacgaagaa 120  
gagactaata ttttgcagga cgctatggaa gaagaaattg atgagactgt gagctcattg 180  
gatgaaagag atgatgagga gagcgaagaa caatggatga agagcggatt agctaccctg 240  
gtccaccttc taatgagagt aaccctccaa ctcatattt atttaattcc ccttcgttct 300  
taccgaagga tgattgcat gatgattgct atgatccctt gaatttggtt gaaatatccc 360  
tttttgatga tgctttctat gcatgtggcc atgatgcaa tatagattat gcttatggac 420  
atgaacttgc tataatcctt aggtgaaaca tgaaattggt gc 462

<210> 4751  
<211> 314  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-001-Q1-E1-G10  
<400> 4751

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tgttgttctc ccacacaagg agatcaagtc aagcatcctg aagcctgaga tcgtcatgtg 120  
agctcacgcg tcacaaatgc ttttaggaac gatgttggtt ggcgtctttg ttctagtga 180  
tactgtaaac agcttaatat atgtggaact tgcgagactt gttaaactga tgagagtgt 240  
tgtgcaaaaa aaaaaataa tttaaaaata tactatgaat aaaaagtacc tcaaagggtat 300  
ctaaaaaaga acaa 314

<210> 4752  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-001-Q1-E1-G11  
<400> 4752

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gtcctaaaca acatggaaat ttgctttggt tatgaattta atcctaatat gatgggcatc 120  
catcagggat atactagtaa ctttcatatg aagtgcactg aatactaaga gaagtgtgat 180  
acatgataat tgttttgaga gatgacgatg gtcagtggcg gagccaactc aagtttagag 240

ccggggcaag atctacatgc tgccaaatta cttactttct acccaaaca acgtccactt 300  
 cacccaattt tctctactaa agcttcatgg acttgacca agggaacccg ggcaagtgcc 360  
 ccagcgtgcc aagttctgtc accgccactg aagatgggtga tattaataatt gtgctagttt 420  
 agtagttgtg aatttgagaa at 442

<210> 4753  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E1-G12  
 <400> 4753

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 ctaaacaaca tggtaatattg ctttggttat gaatttagtc ctaatatgat gggcatccaa 120  
 gagggatata ataaaaactt tcatatgaag tgcattgaat actaagagaa gtttgatact 180  
 tgataattgt tttgagatat gaagatggtc agtggcggag ccaactcaag tttagagccg 240  
 gggcaagatc taagtgtctgc caaattactt agtttctacc caaacaact tccacttcac 300  
 ccaattttct ctactagagc ttcattggact tgcaccaagg gagccccggc aagtgcccc 360  
 gctcgccagg tgctgtcacc gccactgaag atggtgatat taaagttgtg ctagttgagt 420  
 aattgtgaat ttgagaaata cctgtggtaa agtttgtg 458

<210> 4754  
 <211> 469  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E1-H11  
 <400> 4754

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 tgaggaaaaa ggagaataat cgtttgattt tggccaaaca tacctctctt ttgaagaaca 120  
 tgaagagaaa actcattttg gcgaaaacaa aggttgcaaa agcagagatg gctttggcga 180  
 aagttcagga atatctctct ccagcagagc ttccaacgga tctggaaact gttacagagc 240

aggagcgttt cctattccgc agaattggcc tgaaaatgaa ggcctttttg atgcttggca 300  
ggcggaagt ttttgatggt actgtgcaaa acatgcactt ccattggaag catcgagaat 360  
tggtcaaaat tgttgtgaag gggaagacct ttgaacaagt taaacatatt gctatctctc 420  
tagaagctga gagtggaggc gtgctcattg cactcgacaa gacaacaaa 469

<210> 4755  
<211> 462  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-001-Q1-E1-H9  
<400> 4755

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aatgttccca ccatttgcta gccagacaca gctaaatgcc agagctagct agcgcataat 120  
agtgcactag tagtagtaca cttgtatcat cttcagcaaa ctactcccta ttccaagaa 180  
attgcacgta tagggagagt tgaggcaaaa aacctgcttc agcagtctcc ctaaacccaa 240  
aaaattatct cctcaaatag tggagagttg caaccctccc cataaatttt caatgcttgc 300  
catgtcagtg cgccgcctcc attgaccgcc gcgccactgg accactgccg cctgctggaa 360  
caccaccgct gccgcgggac ttctgtgctg ccgttgctgg aaatccgcgc cgccgccacc 420  
tgccaccgca accttgacga aaagatgcaa atgagagaga tg 462

<210> 4756  
<211> 370  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-001-Q1-E2-A1  
<400> 4756

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cagatcaatt caactagcag cgtcatcgtc aaggagtacc ttctcaatgt cacttctggt 120  
aaactgggca ttgagttcac ccccgatgaa ggatccttcg ccttcatcaa tgccatggag 180  
gttctacctg tgtctggcac ctcaattttt gattcagtc acaagggtgga cggtcatggg 240  
ttgaaaggcc cttttagcct ctacggcatc gggatcgaga ccatgtacag gctgtgtgtg 300

ggattcatcg atgtactggc taggaaagat gatccaggat tgtggaggag gtgggataaa 360  
gatgaccatt 370

<210> 4757  
<211> 429  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-A4  
  
<400> 4757

cggtccgaaa tcccgggtcg acgggggaaa aaacaatgtt gctttcctct gtctctttat 60  
gcttggtaaa ttggaagatt gcatacaatt gctttagac agcaaccgta tacctgaagc 120  
tgcattaatg gcgcgttctt atcttccag caaagtttca gagattgtag caatttggag 180  
aaaagacctc agcaaagtta atccaaaagc tgcagattct ctggcagatc ctgctgagta 240  
tccaaattta tttgaagact ggcaggttgc acttactgta gagcagaatg ttgcttccca 300  
gagggggcac tatccttctg cagatgagta cttgaaccat gctgagaagt cagacactac 360  
tcttgtggaa gctttcaaaa ggatgcgggt cattgaagaa gaggaaccag tggaagcact 420  
ggatgaaaa 429

<210> 4758  
<211> 324  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-A5  
  
<400> 4758

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gacgacggcg atgtctcaca catgcttaca gacagcaacc gtgggacgta gactaccggc 120  
ctcagccttc acgacacca catccgactt acaaagactg gctgagctag gagctcccaa 180  
cacacactca atacgcccgg gtctgcagat tctcaggcag atcgagcaga gtaccccagt 240  
aacgtgtgtg actggcaagt tccccttacg ctgtagcatc tgctgacatc ctacaggggc 300  
agaccatcct tgcgcagatg agta 324

<210> 4759

<211> 423  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E2-A6

<400> 4759

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 ttaaaccata acttagcatc accctttaac gagaaaggaa acaacttaag aatcaagtaa 120  
 tagcgaattt tttccacatg agcaaataagg gtggctatat catccaattt agtaagatgt 180  
 gccacaacag tttcagattc ataaccatag aaaggatcag attcaaccaa agtaatcaac 240  
 ttaggatcga cagagaattc ataatcctta tcagtaacaa agataggtga agtagaaaac 300  
 ttaggatcat accgcattct agcattcaaa gacttttctt tcagcttagc taaccgtttc 360  
 ttaagatcat ctctatcatt acaagcanna gagtctctag cagtttcttc atccataata 420  
 taa 423

<210> 4760  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-001-Q1-E2-A7

<400> 4760

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 ggggtggtaga aaacgggtgt agggttgcag atcagcaacg caagctgcaa tccgcaagct 120  
 gcagtggcag cgtccgaaag agatgcgcgg aatgtacata agtagtgcg ggcggtggaa 180  
 cttttgtctg aagagatgat tttttcgtat gtaattgcag gatttgactc tcaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagaa gaacaaaaaag 300  
 aataaagcta aaaataaaaaa tccataagac atcaaa~~aa~~aac ttcaaaaaat gtcgccaaaa 360  
 ttcacataag ggagccatca aataacgggg ccccccaagg ggaaaaacct tgcgttacct 420  
 aag 423

<210> 4761  
 <211> 406

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-A8  
 <400> 4761  
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 aacgagcgca agcacatcga cccgctgctg gagtgcctca aggagtggaa cggcgagccc 120  
 ctgccgtctt gctgagcagc cgacgagcca aggtaacacc aaaggaaaag aaaacacgta 180  
 cacacaaagt gaatatagaa gtggttcaag actgtgaagc gggaggttcc tggatatctt 240  
 acgtttcatt gtacttagtt aagttgatac tactgttggt ttttctcgct gccgccatgc 300  
 catgagcagg cgaggcaggc agcttctcaa acttgtgttg ttgtaacttg tatgatggga 360  
 gcttaagtac attactttgt ttcataatac accgtgttat cgccat 406

<210> 4762  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-A9  
 <400> 4762  
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 gcgtttgggt ggcctacagt gcgtacgttt cggatattga tttcttcgtg gagtctagt 120  
 ttcgtgcgtg tgtggttggg ggtagttggt tggttttggt agtgtgagtg cgtcgtgggt 180  
 gccgtgtact cctgtgtgtg tgtcaagtgt tgccacctgc gattccattt tcattccgtg 240  
 cgatgaataa attaagaagg ggtcttcttg acgcgtctag cgggcgcacg gccgcctagg 300  
 atgcttagcg agcggcccg cacttcagat aatttcttgt ctctcctttt aactagaata 360  
 gtcacttagt agtccctttt tc 382

<210> 4763  
 <211> 465  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E2-B4

<400> 4763

tcctgcgggca cggtcgagaa ttncggggtc gacgggtacg cactctctcc cttccaccat 60

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tgaaaatagc caccatacct acctattatg gcatttccat ggccattctg agatatattg 180

ccatgcaact ttccaccgtt ccgtttatat gacacacatt acttttgtca tattgctttt 240

tgcatgatca tgtagttcac atcgtatttg tggcaaggcc accatcataa ttttcataca 300

tgtcgctctt gattcattgc atatcatggt acacccccgg aggtattcat agagagtcac 360

atcttgttct agttttgagt tgtaaataca tagaagtgtg atgattttca ttattagagc 420

attgtcctag tgaggaaagg atgatggaga ctatgattcc cccac 465

<210> 4764

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-B5

<400> 4764

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ccgctcccgt ctctgtctac tcttttagtta cttagtacta ctaccggtag tggttatccg 120

tctccatttt ttcaccatca tttttttaat cagaaacata gtactacagt acatgtttgt 180

atgtgtgttt gatttgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agaaacacaa aaagaggaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaagggg gcccccaaa ggggtcaaac ttaatttacg ctgaaaggca 360

agttaaaacc ctcctcaaagg ggtcccaaaa ttaaattcca ggggcgttct tttaaaacgt 420

tggaacgggg aaaaccccgg gggtttcc 447

<210> 4765

<211> 233

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-B7

<400> 4765



gtaccggacc agaattcccg ggtcgacggg gttccaaaaa aaaaaaaaaa aaaaaaaaaa 60  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 ccaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agcgggcccgc ccaaaggat caaacctaac 180  
 ttacccttgc atgcaacttc aaaccctcc aaaagtgcc ccaaatttca att 233

<210> 4766  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-B8  
 <400> 4766

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 aagcagggtga gatgacatgg atagggacaa aggtaatact atgaaggaag atagtgaccc 120  
 taatagtgca tccaaacggc gaaaaattaa gagagatcag tctgctttag aagctgggga 180  
 atatgcacct tctgctccac agcctccgag ccttgaggct ggtaactcgc aatttgaaat 240  
 acgagagaga gaaagaaagg gtgttatttc acagcatcgg ccgtcacatg ctgatgacct 300  
 ccctaggatg catgccaagg attcaataag caagacaagt cgtagagaga ctgaccaaac 360  
 gcatgataga gaacgggaag aggaaaagag gccaagaact gaagcaagaa gaaagcat 418

<210> 4767  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-C1  
 <400> 4767

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 tccttgaaa gtgttgggat ggaaggcacc cgtggatagc attagccatg gaaagtgaag 120  
 gtatatggtg gaaaaaggaa taaactttat tttctgcttg ggaacctcct atgatataac 180  
 tagcatggaa ggtgttggga actctaagtc gttttcgttg gtgggaagga cacacctccc 240  
 aaaatgtttt tatctctaag ttttttgctt tgagctctgg aacctctaca aatccgtact 300  
 tcctctacg aagggccttt ctattacttt gtgaaatttt tattttttaa tttgagtctc 360

catcttctct tataaaagca ccaactttgg aggcactatg atcgtacttg agcatttgtg 420  
gt 422

<210> 4768  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-001-Q1-E2-C10  
  
<400> 4768

ggcccgaaat atcncgggtc gacggggcca gagatcatca ccaccccgta tgactggcgc 60  
atccacgtcg gcgatggcga gtcggcgccg cgagaccgca gtgagcgcat ctgccaccct 120  
gccgctcttc ctgtagccgg cgtgatgacg acgaagatga ccaccgtcgg gaggaccaag 180  
accgagatcg tcggggccgt gacgggtcca ggaacggcag gggctggggg gagaggggtgc 240  
gtcgcagcct ctcccgcgcc ccccgggacg acaaccgcga ccgtggtcga gagcagcaag 300  
gagggtcgtga tggcggtcgg cgatgccatg aggaagtggc cccttcgctg ctgctacgtg 360  
gtccgggtc ctccagcgtg gtggccgcac acgatgcgga gatggtgcca gtgctcctcg 420  
gccgcctgcc cg 432

<210> 4769  
<211> 457  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-C5  
  
<400> 4769

gtaccggacc agaattcccg ggtcgacggg tgtatttgat gcggcaataa aggtgggtact 60  
tgcgccacca aaggcgaaga agaagaaaaa ggccgagagg ggggcttgct ccattctgtg 120  
atctaatacat cggtagacaa agaacaaggg cgaagttgcc gccatgctat attattgtta 180  
cgtcttgctt cagcggagct gcaactctcat ggtcgtcgtc cctccccctt accccaccct 240  
aggttacca ccggcagctg cagcaaggtc tctttgtcga ggcatcgggc gatccatttg 300  
tttgatttct cttcttctct ccttgatgatt atctcgtgtg actgacaagt cgtggcaatt 360  
taggtaactt gcttagtaga cggatatttc cgtgtttgag accccgtaaa aaaaaagtat 420

ctcgttggtta tctcgggtcc ataagtagag acatgat

457

<210> 4770  
<211> 469  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-C6  
  
<400> 4770

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ttctatgata gtttttatta tacgcaactt ggatgctcat cattctagga ccaaatttgt 120  
aaccatagca aataccgtga tggttctaaa taacctcaaa ataataaag tgaagcatga 180  
gagactagaa atttcttcaa attaagtcac caccgtgctc taaaatatat aagtgaagca 240  
ctagagcaaa aactatcaag ctcaaaagat ataagtgaag cacatagagt attctagcaa 300  
attctaactc agtgggcttc tcccaaaagg tgtgtacagc agggatgatt gtggtaaact 360  
aaaaatgaaa gactaatata atacatgatg ctccaagcaa aacacatatc atgtggtgaa 420  
taaaaatata gctccaagta aagttaccaa tgaacgaaga cgacagagg 469

<210> 4771  
<211> 316  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-C7  
  
<400> 4771

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atcattctag gaccaaattt gttagcatag cagataccgt gatgttctgg aatagtctca 120  
gagtgggtata agtgaagcat gagagactat aaatttcttc aaattaagtc accagcgtgc 180  
tctaaaatat ataagtgaag cactagagca cagactatca acgctcacga gatataagtg 240  
aagcgcagag agtatgctag cagattctaa tctagtgggc ttcgccaga aggtgtgtac 300  
agcagggatg attgtg 316

<210> 4772  
<211> 412

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-D10  
 <400> 4772

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 tcccagtttg tgctagcctt ctttaaggcaa acttgtttaa cttatgtctg tactcagata 180  
 ttgttgcttc cgctgactcg tctatgatcg agcacttgta ttcgagccct cgaggcccct 240  
 ggcttgatt atgatgcttg tatgacttat ttatgtttta gagttgtgtt gtgatatctt 300  
 cccgtgagtc cctgatcttg atcgtacacg tttgcgtgcc tgattagtgt acgattgaat 360  
 ccggggcgtc acaggttggt atcagagccc actgcttgta ggaaccccc tt 412

<210> 4773  
 <211> 193  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-D4  
 <400> 4773

gggtcgaccg gggaggacga caacgacgac aatgaggaat acaagcaca ctacgccttc 60  
 aacatagatc atcactcttc tataatgaca cccaatactc tatgcagttt gccatcattt 120  
 taatacgtcc taaatgtgaa tatccctgta cttacacaac attatcttct ttcacacat 180  
 ttcccatttt tca 193

<210> 4774  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-D5  
 <400> 4774

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 aattgttagc ttgtgattaa cttacagac accgtatatt atgtaaaatg tcctccactc 120  
 acaccagtc aatttaacca attttctgt gatctattta aagtttgcg tgagggtccga 180

cgagcagaga tccggccggc gcgccatttg ttgtaattgt tgatgtaaac aggagttgcc 240  
 ttttgattga gcaaccatcc tgctataagc aacatgtttc tcattcttcc cttctggtgc 300  
 cccccaaccc ggcgggctag cttatagttg ttggcaaagg tgtacacacc aatcaacctc 360  
 ctcacagtta taataagcag gcgcagtttg ccc 393

<210> 4775  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-D7

<400> 4775

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 tcttctgagg taccttgctg ctgcagttgt tgtcaacaag aggagaagga acatgcttaa 180  
 ggaactcatc aaggtcatcc agcaggagca gaacagctac aaggatcca tcattgagtt 240  
 cctggagtgc ctgtatgtca agtatgattt tgatggcgct cagcagaagc tcgtcgagtgc 300  
 cgagcaggtt atactgaatg atcctttcct ggggaagcgc gtcgaagaga ggaatggcat 360  
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 ctgccgtata catcgctgca t 441

<210> 4776  
 <211> 463  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-D8

<400> 4776

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 aacttggagt acagtatggt caacacaaat ataaataaat aatgagttca ttacagtacc 180  
 ttatgtggtg gtttttcttt ctttactaa cggagcttat gagatttcct gttgagtttt 240  
 gtgttggtgaa gttttcaagt tttgggtaaa gatttgatgg actatggaat aaggagtggc 300

aaaagcctaa gcttggggat gaccatggca cccaagaca ttcaagaata gccaaaatcc 360  
 taatcttggg gatgccccca gaaggcatcc cctctttcgt cttcatttat tggtaactta 420  
 acttgcagct atattttaat tcgccacatc atatgtgttt tgt 463

<210> 4777  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-E5  
 <400> 4777

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 aagggtgctg ctaggttgct actactgggt gactgttcgt gcagttttcc tagagttagc 120  
 tgttcgtgca tcattttttc ctttgtgaat tagctgttcg tgcgtcagtt actcaaaaaa 180  
 aaactgttca tgcattcattg atgattgtgg tgaatcggct gaggtaagat tagctcttcg 240  
 tgcagcttct gcttgttggg gtcgagttct cttttttttt aagtcttatt ttctttttcc 300  
 ttgtatttct ctgttccttc aaaatagaaa tgccgggcat gtcattgcgc atggctgatg 360  
 aacatgcgat agacacatat ataattcattg gcattatgtt tttaaaagca aaaaatctta 420  
 agttgcgcat tgacagtgga cg 442

<210> 4778  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-F5  
 <400> 4778

gtaccggtac gagaattccc gggctcgacgg ggagttccaa cggtgcccgg actgcaacga 60  
 gaacggcctc atcggatgcc ccgtctgctg ctgctgatgc tactgttttt ttccgttaca 120  
 gtctaccgta ggctaaagtt ctctgctgt tttagatgct tctactttgt acaatgtgaa 180  
 gagcatttac agaagactcc taatatatca cggcaagagg ttttgcttac gatcctacag 240  
 taataattat caccctcacg aataagttca gtagtagatc catgatgtca ggttttgttg 300  
 gtgaagactg aatacaacca tagaaatata aactgagtta atactgacgc taataagcat 360

agttgcgggcgc gcattgcatc gatgatttac gacgtttcac tttttttcca agcatttttc 420  
 atatcgctgt tcac 434

<210> 4779  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-F6  
 <400> 4779

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 ttggttatga atttagtcct aatatgatgg gcatccaaga gggatataat aaaaactttc 120  
 atatgaagtg cattgaatac taagagaagt ttgatacttg ataattgttt tgagatatga 180  
 agatggtcag tggcgggagcc aactcaagtt tagagccggg gcaagatcta agtgctgcca 240  
 aattacttag tttctacca aataaacttc gacttcaccc aattttctcg actagagctt 300  
 catggacttg caccaaggga gcccgggcaa gtgccccagc tcgccacgtg ctgtcaccgc 360  
 cactgaagat ggtgatc 377

<210> 4780  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-F7  
 <400> 4780

attcccggtg cgacgggaag ttacagaatg aggacggttc atggttcgga tcatggggta 60  
 tttgcttcac atacggcacg tggtttgcta tagagggcct atcggcagtt ggacagtgtt 120  
 acaataatag cacctacatc cggaagggtt gccagtttct attatcaaag cagctaagga 180  
 atggtggatg gggtgagagt catctttcat ccacaaccaa ggcatacacg aacctagacg 240  
 gggagaaatc acatgtagtc aacaccgcat gggcaatgtt ggcactaatg aaagctggac 300  
 aggccgaacg agatccgtct cctttgcacg aagctgcaag acttaccatg agcatgcaac 360  
 ttggcaatgg tgacttccca cacgaggaaa tgattggaag tttcttgaaa aatggtc 417

<210> 4781  
<211> 418  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-G5

<400> 4781

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gagctcgtgc acgccaaacta aattaccagg tactttcgtt tcttggtaat ggttctaagt 120  
ttcatgagaa tatgatgctg cctaaattgg atacatttgt tttgcttaca aatgaagggc 180  
ctagcttgga gaaggatgaa cattggagca agaacaagca tggagatgat ggcattgtgca 240  
aggggaacaa gaacggagtt acaagtgatg atttcaggac tttgaagcca ccataatggg 300  
tgcattgaagc cttggacgaa atatacaaga tgccacttca taaatttcgt tccgagggcta 360  
ttttagggtgc tgcgtcacct tattattggg ccaggcccat gtaatttcga aatacata 418

<210> 4782  
<211> 443  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-G6

<400> 4782

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agggggcgag cctgccccga tgtcttgaaa gggtatggga ctcggttggt cctacccttg 120  
gtccattact ccgacaaata ctaagagaag tttgatactt gatgattgtt ttgagatatg 180  
aggatggtaa tattagagtc gtgctagttg agtagttgtg aatttgagaa atgcttgtgt 240  
tgaagtgtgc aagtcccgtg gcatgcacgt atggtaaacg ttgtgtaaca aaaatgaaac 300  
atgaggtgtt atttgattgt cctccttatg agtggcggtc ggggacgagc gatggtcttt 360  
tctaccaat ctatccccct aggagcatgc gcgtagtact ttggtttttg atggattgta 420  
gatttttgca ataagtatat gag 443

<210> 4783  
<211> 421  
<212> DNA  
<213> Triticum aestivum



<223> Clone ID: LIB104-001-Q1-E2-G7

<400> 4783

taccggtacc agaattcccg ggtcgacgga cctgctgcta tacatactgg accaattact 60  
agagctcgtg cagcccaact aaattaccag gtactttcgt ttcttggtta tggttctaata 120  
gttcatgaga atatgatgct gcctaaattg gatacatttg ttttgcttac aaatgaaggg 180  
cctagcttgg agaaggatga acattggagc aagaacaagc atggagatga tggcatgtgc 240  
aaggggaaca agaacggagt tacaagtgat gatttcagga ctttgaagcc accataatgg 300  
gtgcatgaag ccttggacga aatatacaag atgccacttc ataaatttcg ttccgaggct 360  
attttaggtg ctgcgtcacc ttattattgg gccaggccca tgtaatttcg aaatacataa 420  
g 421

<210> 4784

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-A10

<400> 4784

taccggtcct aaattcccgg gtcgacgggg agtccgcatg gctcgcgagg tggggccaca 60  
agttaacgtg tctctgtcag tacgcagtggt caggggcaag gcatgttgcg ctcttttttt 120  
tcctagaccg aagcaacagc tttgcctttg ctaacaacta gtaaataaaa tttggacaga 180  
aaatcccttt tggaggcaga gctccatgga gaccggtttt tgaaaaattc agagtccata 240  
tttttacatg tcaaaaactg agataatata tacatatgaa cgcataatgc ataagtgtgt 300  
aaattttcac gatgaaataa gttgatacga ggagtgtgcc aaaaaacaca gatgatgaca 360  
ggttaacca tgaaacggtt cagcctttca ggcc 394

<210> 4785

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-A11

<400> 4785

cccgggtcca cgggcagcaa caaaggcagc taacagcaac atcaacagca acaacagcaa 60  
 caacaacagc agcaacagca acagcaacag cagcaacaac agcaacagca acagcaacag 120  
 caacaagcag caacaacggc aacagcaaca acaacaacaa catcaacagc aacaacaaca 180  
 acagcaacaa caacaacaac aacaacaaca acaacaacaa caacaacaac aacaacaaca 240  
 gcaacagcaa cagcaacaac agcaacaaca gcaacaacaa caacaacaac aacatcaaca 300  
 acagcaacaa cagcaacaac agcaacaaca acaacaacat taacggcaac aacagcaaca 360  
 acagcaacag caacagcagc aacagcaaca acaacaacag caagcagcaa caagagcaac 420  
 gacaacaaca gcagcaacg 439

<210> 4786  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-A2  
 <400> 4786

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 ccgcatctcc atactcagcg aaaatagccg aacgaagatg tagtgcagcg gatgaagggt 120  
 aaacatagca aagacgtcat caaaccgcag gacgatcgta ccccgatgt cgccatccac 180  
 aaagcccttg ccctctggca ccttggccac gaaaaccggg tatgccacat ccttctctct 240  
 gagacgccgc ttctccaaag aaagaacact gtcgtgcaga ctccgcatag caccggttgc 300  
 agcattgagc atatttggtg gtagcatcgc cctaccgcgc acatgcaccc tcctcgagat 360  
 atcctgcggt gaacgtggcc cgtctgagc acggatcgta caccgtgccg gctggctcgc 420  
 acccttctta atctttcctt tgcgtgcctt c 451

<210> 4787  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-A7  
 <400> 4787

ggtccagaat tcccgggtcg acggggagtt taaccaggtt cgggccgcaa gtgacgcgta 60

ataccctact cttactgggt tgtgtgtacc tgggtgttctt ggactagcta caaagtgtgc 120  
 cgggtccaaa aagttcgaat ccgcctccag tacgcctcgg gcctcctttt aaagccaaag 180  
 gggtcgccac agtggcacac aggaggtgga aagtttgtac tgtatacaag tctatcgctt 240  
 ggcaccgtac gacaaaacac atttaatgcg ctgccgacgt gccctcttac tttactgggg 300  
 acgacaagga agctcgtcgc atccgccgcc gcttcgtctc gctctgacgc gcgtccagcc 360  
 tgactacgca tgcagcgcca tgctgggttg ttgctgagtt ggcgcggtgg cagagtcttc 420  
 atggagatct gcat 434

<210> 4788  
 <211> 98  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-A8  
 <400> 4788

cgcctgcacg taccggtcca gaactcccg gtcgacggag tacacgaata cagctctggt 60  
 tgatatcaac ctgtgtctac aaactgaggt actcagca 98

<210> 4789  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-A9  
 <400> 4789

taccggtcca gaattcccg gtcgacgggt tggatacatt tgttttgctt acaaataag 60  
 ggcctagctt ggagaaggat gaacattgga gcaagaacaa gcatggagat gatggcatgc 120  
 gcaaggggaa caagaacgga gttacaagtg atgatttcag gactttgaag ccaccataat 180  
 ggggtgcatga agccttgga gaaatataca agatgccact tcataaattt cgtcccgagg 240  
 ctattttagg tgttgctgca ccttattatt gggccaggcc catgtaattt cgaaatacat 300  
 aagtataggc tatttttaga gtccgtatgt gtggggaaac aagagatagg gttgatttcg 360  
 gacccctcca ccaagggcca cgaaattccc cctcttccct ccatatatac aacccttagg 420  
 gcatcgttta gactttgggt tttgtttaca ttaaaa 456

<210> 4790  
 <211> 322  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E1-B2  
  
 <400> 4790

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 taagcttctt tttgcggtgt gtttgctgac acagatgaat attgggttta cgaataaatc 120  
 taactaagac caatagttac agtcactctg aaggcatgaa tgctagagca ggtctaggtt 180  
 tgaaggtctc tgcgacgtat taaattgatt tgggataata tatagggtttt tcatggcaaa 240  
 taaatactgc ctacgcttga ggttaatcga ggggtgtcca ttcacaatga cagtaagggc 300  
 agtagggcat acagcgtggt gt 322

<210> 4791  
 <211> 472  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E1-B4  
  
 <400> 4791

acgcctgctg gtaccgctcc gagaattccc aggtcgacgg ggtctcactg gtccatatct 60  
 ctttcttttag caacattgaa atcctcttga acctttaggg aatgccgctg cagtctacta 120  
 aagaaatcaa acagacccaa ctgctcaact acaaatttct taggattaat ctgtcgcaca 180  
 catgcacctc ataccgaggt taaataattc aaaatgattg acgaagctaa aatctaaaga 240  
 caacttaaga ttactgaaaa ctgcccaaaa caataatatg actgaattgt tagatggaac 300  
 caaaaaggaa attgtattta tcaagtttat taatctgcat gaactaagac agtctccgat 360  
 attcaagaat gtagtggctc ttgattttta atcagagata acaaatgacc agatgcgtac 420  
 aatagagggga aggagaagat actcacgtgt gtagecgcgt tgaatttgct gc 472

<210> 4792  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-B5

<400> 4792

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accttttaggg aatgccgctg cagtctacta aagaaatcaa acagacccaa ctgctcaact 120  
acaaatttct taggattaat ctgtcgacac catgcacctc ataccgaggt taaataattc 180  
aaaatgattg acgaagctaa aatctaaaga caacttaaga ttactgaaaa ctgccccaaa 240  
caataatatg actgaattgt tagatggaac caaaaaggaa attgtattta tcaagtttat 300  
taatctgcat gaactaagac agtctccgat attcaagaat gtagtggctc ttgattttta 360  
atcagagatt acaaatgacc agatgcgtac aatagaagga aggagaagat actca 415

<210> 4793

<211> 469

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E1-C1

<400> 4793

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acatgatatg tgttttgctt ggattttcat ttcattttat tttgtttttc tttttgtttg 120  
aataaaatacc aagatcttaa attcttaaatt gttagagagt cttcacatag ttgcataatt 180  
attcaactac tcattgatct tcacttatat cttttggagt agtttgtcat ttgctcttgt 240  
gcttcactta tatcttttta gagcacggcg gtgggttttat tttgaagaaa ttgttgaaat 300  
ctcatgcttc acttatatta ttttttagagt ctttagaaca gcatggtaat ttgcttgggt 360  
tataaaatta gtcctactat gatgggcatt caagatgggt ataataaaaa ctttcatgta 420  
gagtgcattg aatactatga aaagtttgat acttgatgat tgttttgag 469

<210> 4794

<211> 117

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-C11

<400> 4794

taccggtcag gaattcccgg gtcgacggga ttgatacccg aagtcaagat accaacctaa 60  
tgtgttcgta gctggtgtgg gtactgatgt cttttgggat cacttcata aacaaaa 117

<210> 4795

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-C3

<400> 4795

cgctgtctg taccggccca gaattcccta gtcgacgggg tctcactggg ccataactct 60  
ttcttttagca acattgaaat cctcttgaac ctttagggaa tgccgctgca gtctactaaa 120  
gaaatcaaac agaccaact gctcaactac aaatttctta ggaggaatct gtcgcacaca 180  
tgcacctcat accgaggtta aataattcaa aatgattgac gaagctaaaa tctaaagaca 240  
acttaagatt actgaaaact gcccaaaaca ataatatgac tgaattgtta gatggaacca 300  
aaaaggaaat tgtatttatc aagtttatta atctgcatga actaagacag tctccgatat 360  
tcaacaatgt agtggctcgt gatttttaac cacagatagc agatgaccag atg 413

<210> 4796

<211> 471

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E1-C4

<400> 4796

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gcgcccacat caacctcaag gtcaagggcc aggatggcaa tgaggtgttc tttcgcatca 120  
agagatctac ccagctgaag aagctgatga atgcctactg cgaccgccag tctgtggata 180  
tgaaagctat tgcattcctg tttgacggtc gcaggctccg tgccgagcag acccctgatg 240  
agcttgagat ggaagatggc gacgagatcg atgcatgct ccaccagacc ggaggccgcc 300  
tccctccacg cgctagaag aagccgttga gagtcctgct tgttgctcggc ctacaagact 360  
ctgatccatc attagagagc acatgaacga atgaaagtct aaaaagaact tgtgaggctc 420

tggccccaag ccatagctga aggacattan gggaggtttt gtttagtgcc g

471

<210> 4797

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-C9

<400> 4797

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aacaggagcc ctccggcctg gactgatcgt gtttccgagc gtagtcgcgg taggcccttc 120  
caagtacaca ggcgaggagg ctgccataag tcgtcccttg aggtcttctt tgcttcttca 180  
taatctgagc ttggatcagt ttctggctctt cccgtgcac acgcaacgcc aattgtagtg 240  
gggccatatt tgtaatggcc catgaacgac tttaacgcat gggggagtaa ctgccaatc 300  
actcttccca ccacgttctt ctcccctacc acgtatgttg catgcattga atggggtaag 360  
taaaagaagc gcgtgggtgcc ggagagtgtc aacgcaa 397

<210> 4798

<211> 458

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E1-D4

<400> 4798

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tgttttcttt cactaacgga gcttataaga tttcatgttg agttttgtgt tgtgaagtcc 120  
tcaagttttg agtaaagctt ttatggacta tggaataagg agtggcaaga gcctaaactt 180  
ggggatgacc atggcacccc aagatattca agattagcca agatcctaag cttggggatg 240  
ccccgggaag gcatcccttg tttcgtcttc gttcattggg aactttactt ggagctatat 300  
ttttattcgc cacatgatat gtattttgct tggagcgggt tgtattatat tagtctttgc 360  
tttttagttt accacaatca tccttgctgt acacacctt tgggagaagc ctatttgatt 420  
agaatttatt tgttttttct ccagtgcctc acttatat 458

<210> 4799  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-D6

<400> 4799

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 aggacaagat cagcggcgac ggccacggcg acggcaagaa ggacggcgag cacaaggaga 120  
 agaaggacaa gaagaagaag aaggacaaga agcacggcga gggccacaag gacgacgacc 180  
 caccacaaca ccatcatcgc atcccattag catcgccagt ttccttgagg agaagtagct 240  
 agaaacagca gcgcatggc cggcatcatg cacaagatcg aggagaagct ccacatgggc 300  
 ggcggcagcg acgagcaca gaaggacgag gagcacaaga agaatgacgg ggagcacaag 360  
 aatgacggcg agcacaagaa ggacggggag cacaaggagg gca 403

<210> 4800  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-D9

<400> 4800

cgccgccccg taccggtcct aaattcccgg gtcgacggga ccaacataga caaaacatac 60  
 acttaagtaa agcacttaca aaacagctac tcaaaccggc acaaggaaaa gccaattcca 120  
 acacagcggg agacatagtc aggccaatgt cgattagaac cagacacacc tacgaatcca 180  
 tatatggccc atccacaaca caaaacaac ttcgcaatcc ccacatggac caaacatcca 240  
 accaacagac caccggcacc ctctccctgc acaaagtcca accccccttc ccccaaaaaa 300  
 tcacatccac cgcccccca agcacacaat attattacag aaataatgga ataataca 360  
 tagaaaggaa ctaaaagagg aagagaagaa attgctacct tcccgcagca gatccacaac 420  
 accaaaacag cctcgcaatg cccacatggg aaaaacact 459

<210> 4801  
 <211> 442  
 <212> DNA



<213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E1-E1  
 <400> 4801

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 tgtgtcttag tattccacaa tcatccttgc tgtacacacc ttttgagaga gccatacatg 120  
 aattaaaatt tgatagaata ctctatgtgc ttcacttaca tcttttgagc taagtagttt 180  
 tgctctatgt gcttcactta tatcttttga gctagataat tttgctccat gtgcttcaact 240  
 tatactcttt gagcagtata attttgcctt atgttcttca cttagatctt ttagagcacg 300  
 gtgggtggatt tgttttaaag aaactattga tctctcatgc ttcacttaa ttactttgag 360  
 agtctcttaa tagcatggga atttgcttaa taagaatatg cttgggattc aagatttgtg 420  
 aaacgttcgt ttgagtgtgt tg 442

<210> 4802  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-F1  
 <400> 4802

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 acctcattgt gaaattacaa atgtgatttc aacaccatt gcaacgcacg aggccttttg 120  
 ctaataataa taaatatgat aataataata atataatact cttcccatc ctaaataata 180  
 gtcttttttag agatttcaac acagaatata tacgaagcaa aatgagtga tctacacact 240  
 aaaatatgtc catatacatc cgttatgtga ctataaatta agaaatatct aaaaagactt 300  
 atatttagaa acatagggag tataaagcaa aagcttgctg attgttatgt tcatataggt 360  
 tggctagtat tactacaaat tctcaccgca actgcctcct ccccaaaagt ccagggtttc 420  
 tttgtg 426

<210> 4803  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-F2

<400> 4803

tcgacgggta cgcaattgct ctagtacttc cattatatct tttagagcat ggcgggtggtt 60  
ataaatagtt gcactctcat gcttcactta tatctttttg agagttgata atagtaatga 120  
caattagtgt ggggtataaa tttggtccta atgtgatagg tattcaagtg ggatataata 180  
caaactttca tgtagatcac tgaaaatgat aagtttgatt ccttgcaata gtttgcgata 240  
taaagtgtgt aatatgcggg ttgtgctagt gagtaattgt ggttttagtaa gaattattggt 300  
gttaacgttc gtgattcccc gaacatgcac gtatggcttc tcgttatgct atgaagtttc 360  
atcatgattt aata 374

<210> 4804

<211> 433

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E1-F3

<400> 4804

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gcaggaaatc agggaaatgca atcacctac agatccagtt cgtttcctgc acctcagtat 120  
gcactgcaga gagagaatgt ttttctgag agacctgac aaccggaatg catatactac 180  
ataaagactg gagattgtaa atttggtgca gtttgcaaat tccatcatcc ccgtgtgcgt 240  
tcacagcctc cccagactg tatcttgagc ccaatgggtc ttccattacg cccaggggaa 300  
gagctctgca agttctattc tcgctatggc atctgcaagt tcggcgtaaa ctgcaagtcc 360  
gaccacccga tggcggtcc gatgggggtc tacgcgtacg gctactccgc ctggcgctcg 420  
cccaacgcgc cca 433

<210> 4805

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-F4



ggtccagaat tcccgggtcg acgggactg agagagcttc cgaagaaggc tggccaacag 60  
 ttagtaatat tatctcaggt cctaattgat gatattaatg ttggttatga aaggctggct 120  
 gaactccagg taaagaaggt gaatggtgtt gaggttgaga atttgaagca tttgtgcagt 180  
 atcgtggaga actgcactga agaaaacttg agaattgatt tggacgatga gcgggagatc 240  
 gtcctgaaat ttcagaacgc gaggcttgcc acgtctcgga tcctcaagcg gcacaggatt 300  
 ccatcagcca tgtcgagtga ccttgtcgat gaacaagcga gcaaagggtga gactgacgcg 360  
 tcatgcacaa actgacacat tttcgta 387

<210> 4808  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-G3

<400> 4808

ggtacgcctg ctggtaccgg ctcgaaattc ccaggtcgac gggttcattg tgctggacga 60  
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 acgataatag tttttttcgt aattactcat gacttcaact attttaatca tgacaatatt 180  
 tttcatcttt tccaattcga ctagcttata ccatgctttg caagacgcta tgtcttggag 240  
 aggatggggt ttgaagacca tgaaagtttc gaaaccaaag aaattatcct aagtacccat 300  
 catggtgtgg attttcaa ataaagtgtac aatgctcaga gtgtaacca ttttggttgc 360  
 aaaaattggg aagcactttg caagatgtat ggttttgatg agggatatgct tgttaccatg 420  
 gatcttggtg atcctacaat cgagcaagag agaccta 457

<210> 4809  
 <211> 319  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E1-G4

<400> 4809

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 tttgagccaa aaaaattcac cgtttgtcaa aaaaaatatc tttcttgccg aaaaagggga 120

tgcacccaaa tcaaaacaca tggatgggct cctagcctag tggcaagagc gcggtgatgt 180  
ctctcggccg actcggggtt gaactgccta ggcaagcact tggtaaagtt acgttacctg 240  
atctctgagt gtgggcactc catgatggac aacatattgt gcgtccacga tgccaaattg 300  
ctcttcaggg tcttgccag 319

<210> 4810  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E1-G5  
<400> 4810

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ttctgcta atgaattgatta gttctcagtc aaacaatgag gcaaatggaa atctggaaag 120  
cacacaggaa gtgcagggtga acccaacgag cttatctcaa tacagggaca tccagagaaa 180  
gattgttgag tttatcagaa agagatacca tattctggaa aaatgcttgg acattgaata 240  
tgccgtgata aaaacaaata ctctgttcc tgatgatctt actgaacaaa atgttcttat 300  
gggacatagc ccagctgttc cagatatcag tgaagtgttg agagaacttc cccctcttgt 360  
accaatttct gccaaagaag tggcttctga tggctcaact gaccaggcac acctttccca 420  
tctttacaac aagatgtgcg gtgtgcttga ggaca 455

<210> 4811  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E1-G7  
<400> 4811

ggccagaat tcccgggtcg acggggtcgc aaacaagttg gggtaggcta tctcaagaca 60  
tagaaagcca agaagaaatt tgtatttttg gttttagatt tgcaaattgt ggtatagcta 120  
tcgctaccta gaatcgatag aagctctgtt tttttcaata aagcccagaa agccatactt 180  
aactcattc tccagcaa atactccactg gtaagctatt ccttcgctag actcctttga 240  
agcatcggaa gtaaacacaa gcaacctgtg gttctttgca accagatctg tgacggtggg 300

ccactcctgc ccactcgttg gcatttctga gatagggtag caatacttca tcaagtcagc 360  
 agcagtaaac aatttgctca atctcatcgg ggcattgtacg taatcctoga tgaatattgt 420  
 aacaatctcc gt 432

<210> 4812  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E1-G8  
 <400> 4812

ggtccaggac tcccgggtcg acggagagca caagaaggac ggcgagcaca agaaggacgg 60  
 ggagcacaag gaaggcatga tggagaagat caaggacaag attagcggcg acggccacgg 120  
 ctacggcaag aaggacggcg accacaagga gaagaaagac aagaagaaga agaaggacaa 180  
 gaagcacggc gatggccaca aagacgacga ctggcaccgc agcagcagca acgacagcga 240  
 cagcgactga gccaaactccc gccgcgctcc ggcaacagcg ttcactgtat gcgagatcta 300  
 tgaacgcttg tgaaaaatgt ggcatacata tatgtttcac agtttttagc gtctgggtacc 360  
 atatgtatgt tatgcgtgac atgtctc 387

<210> 4813  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E1-H1  
 <400> 4813

acgcctgctt gtaccggccc taaattcncg agtcgacggg tacggattat ccggaattgt 60  
 tgtttgttct tccggtctca tttaaacttg cctagttagg tagtttcatt atgcttcacc 120  
 ccttgccatg ttttaacaaca tttaatattg atcagtagca ataccgagag agaactaact 180  
 aattgttgtg gtgtttcgtc aatatgcaac ttgttacata ttgagctcca ctttaacttta 240  
 gcgttggttg tgcactttgc catgccatgc ctcatcacac tggacatgca tcatacttga 300  
 ttgtgcatca tgacatgatt atgcctgtgt gtttaccatg ttgtttgctt cattccgggt 360

tgcttctctc gttagcttcg gtttcattcc gga

393

<210> 4814

<211> 226

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-H2

<400> 4814

acgcctgccg ggtacggccc gaaattccca ggtcgacggg ttttgctcat gtttagtaat 60

aaataattta tctagcctct gttttggttg tgttttttgt gtttaattag tgtttgtgcc 120

aagtagaacc gttggaaga cttggggaaa gtctttttga tcttgctgta aaaaacagaa 180

actttagcgc tcacgagaat ctatgccatt tttatttgga aggtga 226

<210> 4815

<211> 359

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E1-H4

<400> 4815

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aatcgcaaca ttaccggaac taagaagcaa caccggaaag aaacaaacaa tatggtaaata 120

gcacaagcat aaacatggca tgatgcacaa acaagtatga tgcattgtccg gtttaattgag 180

gcatggcatg gcaaagtga acaacaaca ctacaaatta agtggagctc aatatgcaac 240

gagttgcata ttgacaaaac ttcacaacat ttatttagtt tgctctcttt taagtacgca 300

ataatattaa atgttggtta acatgggaag acgggaagca agagagaact acctatcta 359

<210> 4816

<211> 267

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-H9

<400> 4816

taccggtcct atattcccgg gtccacggga agcgaccaag gacgatagac aggggtgctgt 60

actctcctcg ctaaactcca ctgaagcttg ctgatctcca caaccttaca cgggtctaca 120  
 aaacagacct tcccacagtg ccaagcaatg caccaccaat gatggcttca tctgttacgg 180  
 aagcgtccta caagggcctc ctccacaatg gcttccagaa caattaaacc gttgttcaca 240  
 ccttccaatc ggatgggtaa tcaatcc 267

<210> 4817  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-A9  
 <400> 4817

ccccgggtcga cgggttgat acatttggtt tgcttacaaa tgaagggcct agcttggaga 60  
 aagatgaaca ttggagcaag aacaagcatg gagatgatgg catgcgcaag gggaacaaga 120  
 acggagttac aagtgatgat ttcaggactt tgaagccacc ataatgggtg catgaagcct 180  
 tggacgaaat atacaagatg ccacttcata aatttcgtcc cgaggctatt ttaggtgttg 240  
 cgtcacctta ttattgggcc aggcccatgt aatttcgaaa tacataatta gaggctattt 300  
 ttacagtccg tatgtgtggg gaaacaaaag atatggttga tttcggaccc ctccacgagg 360  
 ggccactaaa ttccccctc ttctctc 387

<210> 4818  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-B2  
 <400> 4818

cgcctgccag taccggtcct aaattcacgg gtcgacgggc actagaggat actgccgcta 60  
 tctcaagaag atctactcgg tctaagcttc tttttcggt gtgtgtgtct gacacagctg 120  
 aattttgggt taacgatcaa gtctaacgat gaccaatagt taaagtcact ctgaagtcac 180  
 taaagctatg agcaggctag gtttgcaggt ctctgcgaag tactaattag gtttgggata 240  
 agctagtgat tgatcatggc aaagagatcg atgctagcct taggtataat catgccgtgt 300  
 cctttcacac tgatagaagg ggcagtagag aatatagcgt attgttggtg tccaggactc 360



tgatataggg ttattaacca aatgcatgaa tgtaactctg tac 403

<210> 4819  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-002-Q1-E2-B5  
  
<400> 4819

attccccgggt cgacgggggtc tcaactgggtcc atatctcttt ctttagcaac attgaaatcc 60  
tcttgaacct ttagggaatg ccgctgcagt ctactaaaga aatcaaacag acccaactgc 120  
tcaactacaa atttcttagg attaactctgt cgcacacatg cacctcatac cgagggttaaa 180  
taattcaaaa tgattgacga agctaaaatc taaagacaac ttaagattac tgaaaactgc 240  
ccaaaacaat aatatgactg aattgttaga tggaacccaaa aaggaaattg tatttatcaa 300  
gtttattaat ctgcatgaac taagacagtc tccgatattc aagaatgtag tggctcttga 360  
tttttaatca gagataacaa atgaccagat gcgtacaata gagggaagga gaagatact 419

<210> 4820  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-002-Q1-E2-B6  
  
<400> 4820

gtaccgggtcc ggaattcccg ggtcgacggg gagccataat aataaaactc ggatgacaac 60  
actttctcaa aataatcata acatgatatt acaaaatggg atctcgctag ccctttctaa 120  
gaccgcaaaa cataaatgca gagcaccttt aaagatcaag gactgactaa acattgtgat 180  
tcatggtaaa agagatccag tcaagtcata ccaaatan acaaaagtaa tgaatcaaaa 240  
taacagtgtt ctctcaagcg ggtgctttta ataagaaggg tgatgactca acatagaagt 300  
aaatagatac gccctttgta gagggaagca gggatttgta gaggtgccag agctcgattt 360  
tgaaatacag atagaataac attttgagcg gcatactttc gctgtcaatg caacaactat 420  
gagatggctg tatcttccat actacatgca t 451

<210> 4821  
 <211> 152  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E2-C10  
  
 <400> 4821

ctatagttagt tcgtattagt cgcagcagca tgagccctcg ggcttgggaat gatccagttt 60  
 ccgagcgtagc tcgcggtagg ctcttccaag tacagacgcc aggaggctgc gataggctcg 120  
 cgcttgagggt catcgttgcg tcgtcataat ct 152

<210> 4822  
 <211> 70  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E2-C6  
  
 <400> 4822

ggggcaccct atagttagtc gtattacgtt ctgctgcttg caggcttcgt agaagactcc 60  
 gcttgggtgc 70

<210> 4823  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E2-C8  
  
 <400> 4823

gtacagggtcc taaattcccg ggctgacggg tcagggaac acactagggg tttgttgac 60  
 caacaggagc cctcgggcct ggactgatcg tgtttccgag cgtagtcgag gtaggcctt 120  
 ccaagtacac aggcgaggag gctgccataa gtcgtccctt gaggtcttct ttgcttcttc 180  
 ataatctgag cttggatcag tttctggtct tcccgatcat caccgaacgc caattgtagt 240  
 ggggccatat ttgtaatggc ccatgaacga ctttaacgca tgggggagta actgccaatt 300  
 cactcttccc accacgttct tctccctac cacgtatggt gcatgcattg agtggggtaa 360  
 gtaaaggaag cgcgtggtgc gggagagtgt caacgcaagg gcctggcctt ctgcattgg 420

ttgagaagga cggccgtcac ccatcg

446

<210> 4824

<211> 452

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E2-C9

<400> 4824

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aacaggagcc ctccggcctg gactgatcgt gtttccgagc gtagtcgcgg taggcccttc 120

caagtacaca ggcgaggagg ctgccataag tcgtcccttg aggtcttctt tgcttcttca 180

taatctgagc ttggatcagt ttctggctct cccgtgcatc acgcaacgcc aattgtagtg 240

gggccatatt tgtaatggcc catgaacgac tttaacgcat gggggagtaa ctgccaattc 300

actcttccca ccacgttctt ctcccctacc acgtatgttg catgcattga gtggggtaag 360

taaaggaggc gcgtggtgcg ggagagtgtc aacgcaaggc cctggccttc tcgcattggt 420

tgagaaggac ngccgtcacc catcgacgga tt 452

<210> 4825

<211> 445

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E2-D10

<400> 4825

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tctatggcta cagaggaaag agcattaagt ctgccctcat cggtaggttct agcctgacat 120

tcacatctgc cattcaggac gttggcggta aactaccac agtggaccat ggcaaagcct 180

accatgcata cacaacggaa aagaagcccg agcctgcgca ttgatcaagg ttgtctactt 240

gtagcacaaa tcatgcaaac cagctcgggt aatttttgag ctgatgtgtg ctgttatgtc 300

tgttttgccc aagcacctag ttcatcttgc aaactgtaat aacttgtttt gctcgacggc 360

aatacaacat acctggaata aatatcttgc ttacttttgc ttcacgaatt ggtacgatca 420

taatcacatg tgacacaata ttgtt

445

<210> 4826

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-D4

<400> 4826

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acggagctta taagatttca tgttgagttt tgtgttgatga agttctcaag ttttgagtaa 120

agcttttatg gactatggaa taaggagtgg caagagccta aacttgggga tgaccatggc 180

acccaagat attcaagatt agccaagatc ctaagcttgg ggatgccccg ggaaggcatc 240

ccctgtttcg tcttcgttca ttggtaactt tacttggagc tatattttta ttcgccacat 300

gatatgtatt ttgcttgag cggtgtgtat tatattaatc tttgcttttt agtttaccac 360

agtcatcctt gctgtacaca ccttttgga gaagcctatt tgattagaat ttaattgttt 420

ttt 423

<210> 4827

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-D5

<400> 4827

tccagaattc ccgggtcgac ggggaacgtg ctgaccatct tcgaggagga aggcgggcgg 60

ccggacgcca tcatgatcct gacggtgaag cgcgacaaca tctgcagctt catctcggag 120

accaaccccg ggcacgtgcg gtcgtgggag accaaggaca gccagctgac gatggtggcg 180

gacgacctga agccgcgggc ggtgctgacg tgcccggaga agaagatgat ccagcaggtg 240

gtgttcgcca gctacgggaa cccgctgggg atctgcggca actacacgtt tggcaactgc 300

cacacgcca aggccaagga gattgtggag aaggcgtgcg tggggaagag gagctgcgtg 360

ctggccgtgt cgcacgaggt gtacggcggg gacctcaact gcccggggca c 411

<210> 4828

<211> 428  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-D6  
 <400> 4828

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 aaggacaaga tcagcggcga cggccacggc gacggcaaga aggacggcga gcacaaggag 120  
 aagaaggaca agaagaagaa gaaggacaag aagcacggcg agggccacaa ggacgacgac 180  
 ccaccacaac accatcatcg catcccatta gcatcgccag tttccttgga gagaagtagc 240  
 tagaaacagc agcgccatgg ccggcatcat gcacaagatc gaggagaagc tccacatggg 300  
 cggcggcagc gacgagcaca agaaggacga ggagcacaag aagaaggacg gggagcacia 360  
 gaaggacggc gagcacaaga aggacgggga gcacaaggag ggcattgatgg agaagatcaa 420  
 ggacaaga 428

<210> 4829  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-D7  
 <400> 4829

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 ggtgtatcca aaccccgatga tatgatacgc tctatcacac ataagcctct ttatatcttc 120  
 ctcaaaacag gcaccatacc tacctattat ggcatttcca tagccattcc gagatatatt 180  
 gccatgcaac tttccaccgt tccgtttatt atgacacgct ccatcattgt catattgctt 240  
 tacatgatca tgtagttgac atcgatatttg tggcaaagcc accttcataa ttctttcata 300  
 catgtcactc ttgattcatt gcacatcccg gtacaccgcc ggaggcattc acatagattc 360  
 atattttgtt ctaagtatcg agttgtaatt cgtgagttgt aagtacataa tagtgtgatg 420  
 attttcatta ttaga 435

<210> 4830  
 <211> 441  
 <212> DNA



<223> Clone ID: LIB104-002-Q1-E2-E5

<400> 4832

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tactccagca tgggtggtggt gcacgagcgc ttcgtggtcc ggttcccga cgccatgccg 120  
ctggacaagg gcgcgccctt gctgtgcgcc ggcattaccg tgtacagccc catgaagtac 180  
cacgggctga acgctcccgg gatgcacctc ggcgtgctgg gactgggcgg gctgggccac 240  
gtcgccgtca agttcggcaa ggccttcggg atgaaggatga cagcgatcag ctcgctcgcca 300  
gggaagaagc aagaggccct cgaaaggctt ggcgcgcgacg ccttcgttgt caacaagaac 360  
gccgacgaga tgaaggctgc gattagcacc atggatggca tcataaacac cgtgtctgca 420  
aacatcccca tgggccctct cttccggctg ctc 453

<210> 4833

<211> 418

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-002-Q1-E2-F1

<400> 4833

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aataaatatg ataataataa taatataata ctcttcccat tcctaaatat aagtcttttt 180  
agagatttca acacagaata catacgaagc aaaatgagtg aatctacaca ctaaaatatg 240  
tccatataca tccgttatgt gactataaat taagaaatat ctaaaaagac ttatatttag 300  
aaacataggg agtataaagc aaaagcttgc tgattgttag gttcatatan gttggctagt 360  
attactacaa atgcctcacg caactgcctc ctccccaaa agtccaaagt ttctttgt 418

<210> 4834

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-F10

<400> 4834

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 taaattactg cgttggtgct gaggtcacca ctatgtatca cttggatcgc cctatgtact 120  
 tgatgggata gcgtgcgatt caaactcgat tttatcctac tgacatcgag ttcaatgtca 180  
 gtgggtatag aatacgtcgc agtttgatcg actaccatac gcgtgtgatg cgcagggatt 240  
 tggaaagtgc aactgagatg tgaccgtcca taccatagac acaatatcgt agtggctctc 300  
 atttcgtgga atcgagagga atgttgacg aggctcgtta aatagccact gatgctgaag 360  
 atcactttga attcgtgtg cagcgtggac aactacaaat cgcaaacgc 409

<210> 4835  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-F5  
 <400> 4835

tacaggtcct aaattcccgg gtcgacgggc gtgaagatga ccagatcgag tctgtagcgt 60  
 gtgtgtcccc cggcgtgagc ccgtggttgc gttcgtggag tgaaggagct gcatgcgcag 120  
 agccgttgcg atctgttga gtcaggtgcg atgtgcgcgc ggctggaggg agttagttagc 180  
 aagctagcta gatggttggc cgggtcatgc tagtgcatgc atgggctagc ccggcgggctc 240  
 atgtgggtcat gcatggatat ggatcgtgca tgtagtgggt agcttagtgc gtgagttagt 300  
 tgccgggtgt gcaggccgtg tgggtgtgtg gcacgggtat aaaaaccct cctccatgta 360  
 ctgatcgagt tgagccgtg tgtagccatg tagccactgt aaggaagaaa aggattgggg 420  
 c 421

<210> 4836  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-F6  
 <400> 4836

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 agctcgtctt tctcggcgtt cgcaagagac ggcgtgacct gtgaatacat cgagtgcggc 120



atgtaacata ggcaaatagc ctgcctgaag agtgagggag agaaaacctg catagatttt 180  
gttctggcgt ttttgtgtgt gtttctagtgt attgtttggg tttattttcc gcgcttatgg 240  
atgtacatta caggtatata agacagcata gtgatgatgt cttcttcatg gttatggaag 300  
tgaaagtaat gttatggaag tgaaagtaat ggtatgaatg ctgtcttcat ggttataaga 360  
cagcatagtgt aaaaataaaa gggaaaggga aagaaaaaaa aaaaagcgg ccgctct 417

<210> 4837  
<211> 331  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-F7

<400> 4837

ttcccggtc gacggggcag tcgctgccag gatgctgatt gtgatgagca ttaagctgaa 60  
gctcgctctt ctcggcggtc gcaagagacg gcgtgacctg tgaatacatc gagtgcggca 120  
tgtaacatag gcaaatagcc tgcctgaaga gtgagggaaa gaaaacctgc atagattttg 180  
ttctggcgtt tttgtgtgtg tttctagtga ttgtttgggt taattttccg cccttatgga 240  
tgtacattac aggtatataa gacaccatat tgataatttc tccttcaggg taatgaaatt 300  
aaaattaagt taatgaaatt gaaattaatg g 331

<210> 4838  
<211> 425  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-F8

<400> 4838

aattcccggtc tcgacgggca ctgagagagc ttccgaagaa ggctggccaa cagttagtaa 60  
tattatctca ggtcctaattg gatgatatta atgttgggtta tgaaaggctg gctgaactcc 120  
aggtaaagaa ggtgaatggt gttgaggttg agaatttgaa gcatttgtgc agtatcgtgg 180  
agaactgcac tgaagaaaac ttgagaattg atttggacga tgagcgggag atcgtcctga 240  
aatttcagaa cgcgaggctt gccacgtctc ggatcctcaa gcggcacagg attccatcag 300  
ccatgtcgag tgaccttgtc gatgaacaag cgagcaaagg tgagactgag gcgtcatgca 360

caaactgaca cattttcgta ggcgtagcta cacagtttct gtggaagcac cgatgttaac 420  
tcggt 425

<210> 4839  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-002-Q1-E2-G1  
  
<400> 4839

ggtagcgctg ccagtagcgg tccgaaattc acgggtcgac gggaagggtca ctcagaatat 60  
ggccctcaag ctaaggaaca ccgacactgg cgagctcatc atgcacctgg agtgggttaa 120  
cctcccccca ggcatgtcgc ggtgatttga tttgatttgc agagggaggc cagctattgt 180  
ctgccttttg tgatcgtaat gttgcttctt ctatatatga gctatgaaaa taattaagcg 240  
atgcctatct cattctttac ataacacca ccgtaatgat ttgtggatct caccaggatg 300  
gtgcgtatat aatatgagca acgtcgtggg gagatccgca gatcatcaca gtgggtgcta 360  
cgtaaggcat gtgatagact tatgctgctg ggggtaatgc ttgctttcag ttttggttct 420  
gcatatgttg tatggctatt ttaatacaaa a 451

<210> 4840  
<211> 343  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-002-Q1-E2-G10  
  
<400> 4840

taccggtcct agattcccgg gtcgacggga agcacctacg taggcaggca ctgaagtggc 60  
actcagcctt cattccagggt gaggataagg agtgtcttgt cccatctaata cagagtctcc 120  
tgccacacct caaccttaag aagaaccgtt catatagcat ctgtggcaac gtcgaattgc 180  
tggccttcac gaatcaatgg tcgatttata gtttgctgcc actgtagatc tacgtcatat 240  
acgtacctta cctcattaat gtgagtgtca cgttctgata cgtgtccccg tttgtgcttc 300  
cagatcctgt tatggttcgc attgccact gaggtcggg aag 343

<210> 4841  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E2-G3

<400> 4841  
  
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 agatcggcgc ttcagcatta agctcgagga gaccttcgat gttcatacgg tacgcaaccg 120  
 acgataatag tttttttcgt aattactcat gacttcaact attttaatca tgacaatatt 180  
 tttcatcttt tccaattcga ctagcttatc ccatgctttg caagacgcta tgtcttggag 240  
 aggatggggtt ttgaagacca tgaaagtttc gaaacaaaa aaattatcct aagtacccat 300  
 catggtgtgg attttcaa ataaagttgtac aatgctcaga gtgtaaccca ttttggttgc 360  
 aaaaattggg aagcactttg caagatgtat gggtttgatg agggatatgct tgttaccatg 420  
 gatcttgggtg atcctacaat cgagcaagag agacctac 458

<210> 4842  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E2-G5

<400> 4842  
  
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 cttccttctg ctaatgaatt gattagttct cagtcaaaca atgaggcaaa tggaaatctg 120  
 gaaagcacac aggaagtgca ggtgaaccca acgagcttat ctcaatacag ggacatccag 180  
 agaaagattg ttgagtttat cagaaagaga taccatattc tggaaaaatg cttggacatt 240  
 gaatatgccg tgataaaaac aaatactcct gttcctgatg atcttactga acaaaatggt 300  
 cctatgggac atagcccagc tgttcagat atcagtgaag tgttgagaga acttccccct 360  
 cttgtaccaa tttctgcaa agaagtggct tctgatggct caactgacca ggcaacacct 420  
 tcccatcttt acaacaagat gtgcggtg 448

<210> 4843

<211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-G6  
 <400> 4843

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 atgccgtccc caagatgagt cgctgtgacg ccggcggcaa gacatacatg accaggtgcg 120  
 ttgccggtgc aagtggagat ccatgccgcg gtgacaggcg ctgtgacggc gtcattccaca 180  
 gcgagatgcc ctgtgtgggc ttggtgctgc gaaggcaaag ttcattggcaa gaggtctgca 240  
 tgtgatctgc atcaagatta gaggagtga catgacaaga ttacggacgt gaatgttacg 300  
 attaattctt tctagccgag ctgagagagt cagttagttt gttagctgcg tgagggtcgt 360  
 gtgcctagag tgattctagg aggaagaagt ggtcaagata agattagatg ggtgcatgta 420  
 aagtggcggt agtg 434

<210> 4844  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-G7  
 <400> 4844

gtacagggtcc taaattcccg ggtcgacggg gtcccaaaca agttggggta ggctatctca 60  
 agacatagaa agccaagaag aaatttgtat tttgggtttt agatttgcaa attgtggtat 120  
 agctatcgct acctagaatc gatagaacct ctgttttttt caataaagcc cagaaagcca 180  
 tacttacact cattctccag caaataactc cactggtaag ctattccttc gctagactcc 240  
 tttgaagcat cggaagtaaa cacaagcaac ctgtgggtct ttgcaaccat atctgtgacg 300  
 gtggggcact cctgcccact cgttggcatt tctgagatag ggtaccaata cttcatcaag 360  
 tcagcagcag taaacaattt gctcaatctc atcggggcat gtacgtaatc ctgatgaat 420  
 attgtaacaa tctccgtggg attctcggat aa 452

<210> 4845  
 <211> 387  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-002-Q1-E2-G9

<400>       4845

tacggctcta aattcccggtg tcgacgggga ccaagcaggc aggcaggcgc accaggctag   60

cggtgcctga tcagcagctg cacatatagt cagtcgagtc gagtcgaatc gaggcagtat   120

agtttagctg gagcttgaga gggtcagatc atggagctcg tcgggagttg gaggaagggtg   180

atgccttaca tggccatggt ctctctgcag ttccggtacg ccgggctctt cctcctctcc   240

gtcgcgtcgc tgcgccaggg catgagccac tacgtcctcg tcgtctaccg gaacgccatc   300

gcgcgcgctg ccatggctcc ctctgcgcta tggtttgaga ggaaaacaag gcgcaaaatg   360

acctctccc tgttctacaa gatcgtt   387

<210>       4846

<211>       441

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-002-Q1-E2-H1

<400>       4846

acgcctgtcg gtaccggtcc gaaattcacg ggtccacggg tagggattta tccggaattg   60

ttgtttgttc tccggtctc atttaaaactt gcctagttag gtagtttcat tatgcttcac   120

cccttgccat gtttaacaac atttaaatatt gatcagtagc aataccgaga gagaactaac   180

taattgttgt ggtgtttcgt caatatgcaa cttgttacat attgagctcc acttaacttt   240

agtgttgttt gtgcactttg ccatgccatg cctcattaca ctggacatgc atcatacttg   300

attgtgcac atgacatgat tatgcttgtg tgtttaccat gttgtttgct tctttccggt   360

ttgcttctct cgttagcttc ggtttcattc cggatttggt aggattcggt cgactacgtt   420

cgtttgacct cttcagggac t   441

<210>       4847

<211>       430

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-002-Q1-E2-H11

<400> 4847

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cgaccagcag cagcagcagc agcattgaga gtttgccga gactaggaaa tatagtccgt 180  
ccgtccgtcg tcgatttctt cggcggacgg acggacacct ctctaaccg cccggggatt 240  
aagttagcta agctagccat gcatgtgtgg atgaatggat cttgaattct tgattgatta 300  
gttacaactg ttattggaaa agctagagat tagataacta actagagaaa agaaaaaact 360  
aactgaacgt ggtgattctg ttccgtcggc gccagcgggtg catataatta aataattttc 420  
accagtgact 430

<210> 4848

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-H3

<400> 4848

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ttgacggtac caccgcggtg tctacatggg gctggggcgt ccaaggagtt gcctctccac 120  
gttcgcatcg acaagatcac ctctgatct cttccactac tcttaattct ccagtgggca 180  
tatgcctaag aagtgatgta ttttggttac ttggttgtag tcccttggtc gcaaaaattct 240  
tgtcttaatt tttttaaata aggatgtatt aagtcattatt ttagtattag atacatccta 300  
tctagactaa tataagacaa gaattttgag atggagggag tgcgtaatac atgtcttggtg 360  
gcagggtattt tgggtgtagt actttgagat cagacgaggt acttcgctag ttccgacagt 420  
ggaagggt 428

<210> 4849

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-H5

<400> 4849

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 gtgataattc tgttgtgccc gggcattttg agcttcatat accgtaatgg ggtacggctt 120  
 ggaagcatgt gaatgtgtct caccacagca aaccatgata ccctctgttg agtgatgaca 180  
 catggaagag aaactcttcg gacctatagt tctccggcgt gctgaatacc acgtcgagtt 240  
 tgatttttcc cgagcatctg gcttcccgac tagggataat actgtgaaag gttgtgttac 300  
 tttggtcaat gcgactcatg tccatttgca ttctattgag tgtgtcctca tagatgaggt 360  
 tcagtccgct atgctaccgc cgtccttgag aacttttagt agccaaaacc cgtctttggg 420  
 tttaggac 428

<210> 4850  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-H7  
 <400> 4850

gcctgccggt acaggtccta aattcccggg tcgacggggg ggttcaacgc ggtgccgtac 60  
 gtggtggcgc ttttcagctg catgctgtgg atctttctacg cgctgggtcaa gaccaactcc 120  
 agcccgtgc tcaccatcaa cgccttcggc tgcgtcgctg agggccttcta catcctgctc 180  
 tacgtggtgt acgcgccag ggcgccagg caccgcgcc tcgccttctt cctcctctc 240  
 gacgtgcgcg ctttcgccct cattgtctcc gtcaccgtgc tcctcgtgcc ccagcccagc 300  
 cgcgtcaagg tcctcggcag cgtctgcctc gccttctcca tggcgcgtct cgtgcgcccg 360  
 ctcagcgtca ttttcgtggt gatcaagacc aagagcgccg agtacatgcc cttctcgtc 420  
 tccttcttcc tcaccctcag cgcgcgtc 448

<210> 4851  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-A10  
 <400> 4851

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gcgacgtggg caagatggag cacgggtgcg agcattaccg gcggagatgc aagatcgtag 120  
cgccgtgctg caaggagggtg ttcccctgcc gccattgcc caacgacgcc acggccttgg 180  
gtgatcggca taatatatgt cgccaggatg ttgaaaaagt agtgtgtgta ctctgtgata 240  
ctgaacaacc ggtgtcacia gtgtgtgtaa gatgtggagt caatatggga gaatacttct 300  
gtgatgtatg caagttttat gatgatgaca cagagaaagg gcagtaccat tgccatgatt 360  
gcggcatatg cagggttggg ggcaaggaaa actacttcca ctgtgcaaag tgtgggtcat 420  
gttatgctgt tgcgttgcgt gataac 446

<210> 4852  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-A2  
<400> 4852

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tacgactcgc tcaagaactt ccgcgagatc tccccgcgc cgcagtcca cctcaagctc 120  
gtttacctga ccctatgctt tgccctggcc tcatctgcgc tgggtgctta cctgcacatt 180  
gccctgaaca tcggtgggat gctgacaatg cttgcgtgta tcggaaccat tgccctggatg 240  
ttctctgtgc cagtctatga ggagaggaag aggtttgggc tgctgatggg tgcagccctc 300  
ctggaagggg cttcggttgg acctctgatt gagcttgcca tagactttga cccaagcatc 360  
ctcgtgacag ggttttgttg ganccgcctc gcctttgggt gcttctctgg cgccgcatca 420  
tcg 423

<210> 4853  
<211> 348  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-003-Q1-E1-A6  
<400> 4853

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tggatgctgt ataaaccatg agttggagaa aaaaaatgat ttttcagttt gagaaccggc 120  
gccgagagag agagggagag ccgagaagag gaaggccggg atatttatta tattaattaa 180  
agaaaaaaag ggcaagttag ttagttggtg ccacagaatg caatgcatgc tcccttcac 240  
atcatcatca tcatcatcat aatgtgatca gagctgagac ctgatcgatg gcaaataa 300  
gtacttagat cagtactcct gcttaaaaaa taaaagtgc aatataaa 348

<210> 4854  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-003-Q1-E1-A8  
<400> 4854

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ttttgtaatg ggtagtagg ggggaggaga catggataat tggtagctta cttactttgt 120  
gttggtggtc ggggtggtc ggtttgttcg cggagactgc tgttattagt ctggtggccg 180  
agttgtagag aactctcttt gctgctgctg ctgttacttc cttctgatgt ttttctgttt 240  
tgttattata tagccggatg aagaaaagat gatgcagttt tatctaaaaa aaaaaatcaa 300  
aaaaaaaaaa aaacaaaaaa aaacaaaaaa aaaaaaaaaa ataaaaaaaaa aaaagcggcc 360  
gctctaaagg atccaagctt acttacgcgt gcatg 395

<210> 4855  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-003-Q1-E1-B10  
<400> 4855

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gacggcaacc agcttgctga ggcagatgag tttgacgaca agatgaagga gctggagggc 120  
ctctgcaacc ccataatcgc caagatgtac cagggtgccg gagctaacat ggcggtggc 180  
atggacgagg acgatgcacc tccggctgct ggcggcgctg gcccgaagat cgaggaggtc 240  
gactaagcga gcacttgtag cagtcttacc ctaaagttat tccgttcgtt atgttggatg 300

ctactgcagt acgtggtggt ggatgtgatg tgtgtgaact gcgtttgctg ctgcttttct 360  
 gttaatgtta gttgcatctg gtgatatgct gcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420  
 aagcgccgc tctagaggat ccaagc 446

<210> 4856  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-B12  
 <400> 4856

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 tgtgttgagg gtcttctttg catgcaacag ggatgaagaa ctggctgcca actatctttt 120  
 ggatcatggc cacgagtttg aggaacaaca atagatgtta gattggtggt accgtcgaaa 180  
 gacagaagag tcagtgcacat aagcagtaca gtttggtgct gttcttatat cttgctgctg 240  
 aatatcacta ctagtacttg tcattagtgc gatgctgctg actttaaaatt tcttgatatcc 300  
 tggaaattct ttctaagtac atatcaatat caatattcaa accttaaaaa aaaaaaaaaa 360  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagcgccgc tctacaggat 420  
 ccaagctta 429

<210> 4857  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-B6  
 <400> 4857

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 gtggctttgt ccctgctcgg tcgccgcatt tgacgtgcag tacatcatcg acgagtgatg 120  
 tcaccgttga tctgtatgaa taatttgtgt caaataaaag gggggaagtg actagtgaag 180  
 taaaacgacc tgtaacttgt taccctattc ttttgcaaat gttcatgcta atcatgccat 240  
 aaacacgaac tgttcgcttc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ccaaatcaaa 360

caaatacaaaa ctaaaaaat

378

<210> 4858

<211> 309

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-B7

<400> 4858

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gaagaagagg atggggatcg agagacgcct ggtggagaag atcgggcgtg cgtagatata 120

ctataggaca tttcatatgg cactggggcc atatgagcat agggattata taggaaatat 180

aataaagtca ttgtatcaac tgttgacgct agctgggtgc gtgcgcgtca gccgtgaaga 240

atgtgccgcg gtctctgtgaa cgaataattt gtgatgcatt cgttatgaaa aactgtcaca 300

tgtttctac 309

<210> 4859

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-B8

<400> 4859

gacggaagta accaactgga cagcacatca ttgttcacat tatccctgtt tcttcttttt 60

cttctttctt tttctgttct ttttatttat atttttcgtt ttttatTTTT tgttaaattc 120

atggacatct tagtagggaa taccaaagga aaaaaaaaac tccgtgaaca atttttccaa 180

aaggaaaaaa aggccaatt ttttaaaaaa aattttaacg gtttaagaat taatttcaat 240

ggttttaaaa ggaattttaa aattttccaa aggaaaagtt cccggaattt tgaaaaaatt 300

tgtaaaattg aaaaaatttc ttggatttga aaaaattcaa cggtttcaaa aaaattcaac 360

aatttcggta aaaattttca cgcattagtt aaa 393

<210> 4860

<211> 445

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-C10

<400> 4860

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gcacggggta aagctcatcc gagctgtcac atcgggtggag taccatccgt gtacgggtgt 120  
gccaaagatc gacactagcg gcgaaggcgg cgggacgacg ggtggtggtg gcgccagagg 180  
gatgcacggg gtaaagctca tccgagctgt cacatcggtg gagtaccatc cgtgtacggg 240  
cgtccttcac agaaaagccg atatcgtcaa attcaacagt gataggattc tcacgagcaa 300  
ggcggcgaac agaaactaga ttagtgacta agtcaggaga cacaagaaca ttagatatgt 360  
taacggggagt agaagtagaa gggaatgacg tttgaccgac atgtgtaatg ggtangaagg 420  
aaccgttacc aacggtgatg cgagt 445

<210> 4861  
<211> 417  
<212> DNA  
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<223> Clone ID: LIB104-003-Q1-E1-C11

<400> 4861

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tggattactt actttagtta atttattatt actggattgt actgctgggc gttagttaaa 180  
ttattacctt cagggtgtgtg cctcgatctc tcttaatcag tagtagtccg cgttggtgcg 240  
gtgacaataa taaaacacga cctactactt gtgcatgttg tgatgcatgc atgtgtactg 300  
gtcattcatg ctgtaaaaaa aaaaaaaaaa aaaaaaaaaa ataacaaaaa aaaaaattaa 360  
aaaaaaaaa aaaaaaaaaa aaaaaagcgg ccgctctaaa ggatccaagc ttactta 417

<210> 4862  
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<223> Clone ID: LIB104-003-Q1-E1-C2

<400> 4862

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 ccagatgacg cccttccttc atccgagccg gatccagatg atgcggtgcg tgcgtcgtca 180  
 gaggcgcccc aacatgaggg gatggggcca cgtccaccgt ttcgggagat ccacgctgct 240  
 cctccggcgt ccgctgaca agaatacctc ggcgtacggc cgtgacagtt agcattggcc 300  
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 gccgctgct aatgggtgta cacg 384

<210> 4863  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-C4  
 <400> 4863

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 cggaagcagc atgcacatca acaatcgact actcactggg caccatccat acgacggcag 180  
 tggggctcag catgttcgcy tcggggacgt gcataacgcy gaagtcgctg ttcgtcgcgt 240  
 gcggctacac gatcgcgtct gtgtctatgg tgctcacggt cctgataggc ctggtggtga 300  
 tgctgctcgc gtcgctcgcc atctgcatgc acggtaccct gctgcacatt gctgttgtag 360  
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<210> 4864  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-C6  
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 cctgatcgca ttcaagtgcg gaatcaagat gccaaaaata atcgacgact cactgttcac 180

catccagacg acggcggttg ggctcagcat gttcgcgtcg gggacgttca tagcgcgga 240  
gtcgcggttc gtcccggtcg gctacgcgat cgcgtcggtg tcgatggtgc tcaagttcct 300  
ggtaggcccg gtggtgatgc tgctcgcgtc gctcgccatc ggcattgcacg gcaccctgct 360  
gcacattgct gttgtacagg cggcactacc cctagctgtg acttcatttg tgtacgctga 420  
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<210> 4865  
<211> 437  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-C7

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ttactccgga gcaacaacat gcattctgcc agtttgtgac tgggtgctct cggcttccac 180  
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ggcgaatact tcaaattgcag ctggagcagc agagtctgca gatgatgac tgcctagtgt 300  
catgacttgt gccaaactatc ttaaacttcc gccatactcg acaaaggagg ttatgcacaa 360  
gaagctgctt tatgctatca acgaaggcca agggctggtt gatcnttcat agtgggttca 420  
aaactaacat acatgca 437

<210> 4866  
<211> 444  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-D1

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tgctgccagt ggctttgttg gcgtctagaa gcttctaggt gaggcggcac cgccttctag 180



cttcatgtaa cttcgggtcta ctccctaaga gtcttggttaa agcttgtgct ctgtagttgc 240  
 ttcagctact ggtaccgtct attgtgtgtg atgtaata ttttggacca ttatgccatt 300  
 cctttttcaa tcaatctgcc cgttgttgcc gtgagtctga agatgattgc tgtgtttgtt 360  
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 cggccgc 427

<210> 4869  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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<400> 4869  
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 agacgatttt tgcaacggcc acgacgaagt gcatctctca attccaggat cagcatgctg 120  
 gatgaatcct ccttgcctgt taagttgcaa tgggtgcaacc aaacaccatg gaggcctttg 180  
 tattanggac ggtgaatctg catcgatagt gatggatgga aattgctcgc cctccttcct 240  
 ccataaacca tggggacctt gtatagttgt attagcctcc ccatctatcc gtcaggaagc 300  
 cctgactttc cctgctattg ctgtcgaaaa cgctaccctt gcagaacatg aaccgaactt 360  
 aagtatcgca catggagctt caggtaacaa atctgaaaga accaaaatta atg 413

<210> 4870  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-E12

<400> 4870  
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 ggacaagatc agcggcgacg gccacggcga cggcaagaag gacggcgacc acaaggagaa 180  
 gaaggacaag aagaagaaga aggacaagaa gcacggcgag ggccacaagg acgacgacgg 240  
 ccacggcagc agcagcgaca gcgacagcga ctgagccagc tccggccgcg ctccggcagc 300



agcgtgcagt gtaggcgaga tcgatgaacg cttgggagaa gtgtggcata catatatgtt 360  
gcaaggtttg gagcgtgtgg tagcatatgt atgtaatgcg tgacatgtct catggatctt 420  
gtgatgtata ataattagcc ggctgcactg cactgca 457

<210> 4871  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-E5  
  
<400> 4871

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gtggttttat cttttaatta gtgtttttgc caagttaaac ctattagatc ttcttgggag 180  
atagtcattt gatcttgctg taatttccag aatctttgcg ctgagtgcc gaattgttaa 240  
aaatcaccag aatgtgataa atagtgattc caattgctgc tgatcaataa agaaattttc 300  
caggtcgtct aattttggta gaattgtttg gggtccagaa gttggtgtta gttacagatt 360  
actacaaact gttctgtttt tgatagattc tggtttgctg gtgttggttg ctttaatttga 420  
tgaatctatg act 433

<210> 4872  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-E6  
  
<400> 4872

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gacctgtgca tgcattgtgag gatcgctcga ggagtgtgca gagacctagc cgtgtgtata 180  
cacgtctgca taccctcagg tgcaccgga gtacagcgat gcttctcgac cgaccatgtc 240  
gtgcttgca tcagcccagc tgggtgtgcat tggtccttgc ttgtacgaca gcattgggga 300  
aacagaatct gatgcgtttg gcatgggtgg ttgagttgag cgctgaaaca agatcaggac 360

ggagcagtgg atcgcgcatg agcctgcttg tgatagcctt ttgttcacag ccagctgtcc 420  
catgaaccgg gaagggc 437

<210> 4873  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-E7  
  
<400> 4873

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ctgtttggga tgttggtggc catgacaaga taaggccttt gtggaggcac tacttccaga 180  
acactcaggg ccttatcttt gttgttgaca gcaacgacag acaccgtatt gctgaggcaa 240  
gagatgatct ccacaggatg ctgaatgagg atgagctgcg caatgctgta ttgcttgttt 300  
ttgctaacaa gcaagatctt cccaatgcca tgaatgctgc tgaaataaca gattagcttg 360  
gtctacactc tctgcgtcag cgacactggt atatccagag tgcttgcgcc aca 413

<210> 4874  
<211> 462  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-F1  
  
<400> 4874

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cgatatttta gaaccaaaca aaaatttggc atgaccttcc ctaaaaatag gaccaaaaag 240  
aatgcttaat gccaaaattc tcgccgaaac ggaaatgaat caacattccg gcaaaaatatt 300  
ggcaactatc gcatatcaaa taccggtaca cctccaaaca caaacacata tgcaacacca 360  
caaacatatg caacaccaca nacatacata gatctagcta ggccgtaaaa agtgcattgtg 420

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462

<210> 4875

<211> 438

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-003-Q1-E1-F11

<400> 4875

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cttggtgagg agttagcctg tcattgaccc gaaccttctt tgggtggcggc tgcttgggcc 180

agtgcggtc cagaggcttg agcaccgccg ggaggtggta cgtcaccatg tcagcgagga 240

ggacgtgcac gtccgctcgt acttggttac gttggagcat aggttctcca atacctgnga 300

ggtttctcan ggatctcact ggagctatga tcctgtgatg gttccttctc tttgggtgtc 360

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gatgtattag tgataata 438

<210> 4876

<211> 301

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-F12

<400> 4876

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cataaatgac gtgcacatcg tcctctgagt cacttcattt cacctcagca gtccgatcca 180

tgagccgtct ccatcaactt ccggcttcat acatcaattt catgcaacta tctattccgg 240

tcacgatcca gcctcaactt cacctggcgc caggcctaaa tttgtttgat caattttttt 300

g 301

<210> 4877

<211> 465

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-F2  
 <400> 4877

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 atcaggccaa acctcccttg gcatcaaagc tgccaatggt gtagttatcg ccaccgagaa 180  
 gaaactgcct tctatttttag tggacgaaac atctgtgcaa aagattcagt cgttaactcc 240  
 aaatattgga gttgtctaca gtgggatggg tccagatttt cgtgttcttg tcagaaaaag 300  
 tcggaagcag gcacagcagt attatcgggt gtacaaggaa accatccctg tttaccagct 360  
 tgtccgagag actgctgctg ttatgcagga gttcactcaa tcctggtggc gtaggacaat 420  
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<210> 4878  
 <211> 430  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-F5  
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 aaaaagact tacttctactg gttagctaga ccaatgaacg ctttttttcc tcggcagacc 240  
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 gcaaactcga tcgaccagcg accaactagc atggctggtc cgcgaatgcc tcctaagccg 360  
 atacagagct cagtaacggg ctaattaagc tggccagatt gcttgcacgg gagcgatgtg 420  
 ggactacaca 430

<210> 4879  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-F6

<400> 4879

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tgagagcacg ttgtttctcg atatccttga agtggcccaa ttttttttcc atggccttgt 180  
ctgaccaatt caaggtacca tgccaagttg ttttgatgtt caatgaattt tgcattttct 240  
cgagttttct cagtcaaaaa ggttgataaa tggctggaca tgtcacaact tgcgtatggg 300  
gacaaaaatt gttcaaact gacatggatg cctaccattg gcatgcccac ccaattgcat 360  
aagttggggg catttcaagg atgtacaatc atagaccata ctgaatggat ggtgttc 417

<210> 4880

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-F8

<400> 4880

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ggtgccctag tatctgagga actctcctac aaactcaaag agttgcctaa agtccgttgg 180  
gtttctctcg attcatacct ggatgtcaga aataaggact atggaggaga accatttata 240  
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cgtgccaatg aaagatcccg gcgcaatgac aggcctcgca actttgacag gtcgaggaac 360  
tttgaaagga gaaggagaa cacacaggcc taccagagtg ggctccaaa ccaaatgcca 420  
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<210> 4881

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-F9

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agaaaaaaaa aaaaataaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa caaaaaacaa 360  
aaaaaaaaaa aaaaaaaaaa aaaaaaactc ctctaaa 397

<210> 4882  
<211> 459  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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acgacataca ttacttttgt catattgcca ttgcatgac atgtagttga catttgtatt 420  
tgtggtaang ggcacacgca tttatttttc atacatgtc 459

<210> 4883  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
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<400> 4883

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<211> 154  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-003-Q1-E1-G2  
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<210> 4885  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-003-Q1-E1-G5  
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451

<210> 4886  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-003-Q1-E1-G6  
  
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accctcaagc agaagggagg cagttaattc tgatgttgcc tgctcacaaa caccggattg 240  
tatgacatgt tttcttcaag agatccactt gccagtgtca tactagagggc acaatgggat 300  
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<210> 4887  
<211> 445  
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<213> Triticum aestivum  
  
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gggaaccaga ttaatttttg tgctgttggg aggctagtaa tggggttcag actgtaattc 180  
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aaataaaaaa gaacaaaaaa taaagaaaaa aaaaaaaaag acaaaattaa aatgaatata 360  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-003-Q1-E1-H10  
  
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tcattgggta tattgttcaa atctttaata gccaacatgg ctggattttt attatgggta  180
tcaataacca gtattatgat taaggttttc aaagtcgctt taacgcaatg gatatcgtat  240
tatcaatgga tatgatttat tctacagttg aaggaatagt cccaagttgc tgcaggctta  300
cgacccggca cttggggggct acattatttc aagttgagat tacatcaaat atgcaagtct  360
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<210> 4889  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-003-Q1-E1-H11  
  
 <400> 4889

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gcaggcgaga tcagttaacc tggtaagcgt cctagcccgc ataattagac aaaataggtg  180
ttttttggtc aacttagcaa aattagatct ctgacangtc agatagattg ttcttaatcc  240
cacttgctca gtattatgtg aactattgga ccacgttgta gatattcgta aatgctgtcc  300
ggagatatac tcgtccactc gggaaaaaaaa annaaaaaaaa aaaaaaaaaa aaaaaaaaaa  360
aaaaaaaaaa caaaaag                                     377
  
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<210> 4890  
 <211> 397  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-003-Q1-E1-H2

<400>       4890

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atggtggact acgttacaca aagaagtga aacgttcata ctgatactct cattgaatcg  120
gaggtggaac aaaacgctga gaatcaaata ccagatgacc cttatgaggt catatcaatc  180
ttcatggatg atttcagtcg cacgaagagg aacatcattg gccatgtctc tgggtgggtg  240
ttgagcgaca gccgcgaaga taagatcgat gattttgtcc aggaaatgga tatgacccgc  300
ttctggccac tagaaaggag agaagggatc gccgaggtcc tctcaagaa tgtggacatt  360
aaaactaagt ttcactgccc tgagaaatat gaaaacg                               397
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<210>       4891

<211>       430

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-003-Q1-E1-H3

<400>       4891

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ttccctgaaa acttcaaaaa ttggtcaatg gtttggggca ccgggaaaac ctttgcaaat  120
ggtggcccaa tttggaattg ggggaacctc ccttggcctc cggtttgtgc aaacgggtccc  180
caaaactgac caaaaagcac aaaatgtgcc aaaaggcgac aactgagatt ttcttgcaat  240
gttgatccag ttgatggtgc acggggcatc caagatttag accctgcaac tactcttggt  300
gtggttgtct caaagaactt cacgacagct gaaacaatgt tgaatgctcg aactatcaaa  360
gagtggtatt tctctgctct tggacctcag gctgtntcca aacacatgat tgctgtcagt  420
actaatctta                               430
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<210>       4892

<211>       440

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-003-Q1-E1-H7

<400> 4892

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atgggcttcc ttttaccgtt gtacatgatg attctgatag atataatatg catgtgcttg 180  
ctgctcctac ttacaattat tatgagagag gaactatacc tccacctctc tatgtttcca 240  
atacgataaa attgcaagaa actgtttata ctatgcatta gcctttacta cgtgtgcatg 300  
aattgttctt ttatgacatg ccgatgcata ggaagagagt tagactttgt cattgcttta 360  
tatatgtctc tttgtgctca ctactaaatt acaaatcatt gttaattaaa attggctttg 420  
atataccttg ggattccggt 440

<210> 4893

<211> 466

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-003-Q1-E1-H8

<400> 4893

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ccaaggaaat agagagttat tttgactgct cagcttcaga tcttgtgctg gttgggtgata 120  
gatactttac tgatgttatc tatggaaata ggaatggttt tcttactgta ttacagaaac 180  
cattgagttt tgtcggtgaa tcttacattg tcagaaaggt tagaaaactg gaagcgtaca 240  
ttatcaatta ttggtacaag aaagggcaca gaccactcaa gcaccctttg ctccctgatg 300  
caagaacgat tgtgaagttt gatccgtgtg aaggcccagt ctcacctaga gcatagcaca 360  
gtcatgtact cctccgttc ggaattactt gtcacagaaa tgggtgtaac caaatgtat 420  
ttaagttata gatacatcaa tttccgagac aagtaattcc gaacgg 466

<210> 4894

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-H9

<400> 4894

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gctcgcgcg cgcgcattcg gtctcgacct gcatgccgag cgcgaacgct ggggtgttcgt 180  
gggagactcc gccaacgatg cggcaatgtt cgagttcttc ccgctctcgg tgggtgtggc 240  
caatgtgctg gacgtgacg atacgctgcc cgtgcccccc gcgtacctca ccgaggccga 300  
aggcggcggc ggttttgccg aagtcgccga gcgcattctg gaagcgcgtt ccctagccct 360  
ccccgcgccc cgcgactgac acggcattcc tgcaccgcaa cacgcgctgg agaccagcg 420  
tcgcttgccc ca 432

<210> 4895

<211> 367

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-A2

<400> 4895

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acagcggagc tctatttgat tcaatcttag gtacgcctgc atgataggtt catcctctac 120  
gatactgaca gctaaattca attcagtggg cgtcggttga gaaatttgat actggaagat 180  
ccctgtgggt atgcaaattg ggccccttgc agcaaattctg cctttcacca tctaggataa 240  
tagccaagag gacagcatgt ataggtcttc ccaccagttg cacagccaga atgagtaatg 300  
ggattcacca tgtagcggca catttagcac ggctcgtgtt ctagttaacc gcatcgtgac 360  
tgcaaca 367

<210> 4896

<211> 437

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-A4

<400> 4896

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accttggtgt tgggtggtat tgtaataaga agaaaataaa gaggcacgaa aagatgttat 180  
ctaccacata tggatgaactt ggatgcagtt taccacatct tttcggtctt gaagatcaat 240  
gcatcaatat agatgtcatg tatttatcat tataatcatg ttgttcggg aatattggtt 300  
cttgatttta gtcattgatg gcaacagatt gaaactatta ctcaaaagta caagcatata 360  
tcatgtcgtc gccaaatgtc atgcgtatac ccattttggc tgtgccgtaa agtttccttt 420  
gttacattca cggatgaaat aaagtttggt tt 452

<210> 4899  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 4899

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taatttggtt acccacgta atactaatgc tatcttgaga gaagccacta gtgaaaccta 120  
tggtcccggt gtctatctct tatcatattt gttttctatc tacttttatt tgcattctta 180  
ctttttgcat ctatattata aaataccaaa aatatatcta tcttatcata ctatctttat 240  
tagatctcac tttcgctagt ggccgtgaag ggattgacaa cccctttatt gcgttggttg 300  
cgatttctca gtttggttgt gtangtgcgt gggacttttg aggagcctcc tactggattg 360  
ataccttggt tctcaaaaac tgagggaat acttacgcta ctattgctgc atcacctct 420  
cctctt 426

<210> 4900  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 4900

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agtagatcca tctagtagct ttttcctggg gatttggtta gttaaaagtt agccattgca 120  
 acttcgtgta cttcgtttgt gtccaacgac cagaccaaga cgccttacgg atccccacct 180  
 ttatcaatac ttcatatata ctgcgaatat tcggattgct tttatcatat tcttgcttgt 240  
 tcttcgattg cttgcaggaa tagaccttcg tggtcagggt gattgtgctc cggcgtggtc 300  
 aataacctct cgggggttgg ttagcgattg ctaaggcaca acgtcgtgca cgttttagt 360  
 cggatcgta aagtcactc caccaaatcg atagttatca tcccatcgaa agatcgggac 420  
 acctcgctc tatca 435

<210> 4901  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-004-Q1-E1-B8  
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 tgtttgccat tcttagaatg ccattttatt ttgctttgct tgctgtttga ataaaatacc 120  
 aagatctgaa attattaaat gttagagatt cttcgcatag ttgcataatt attcgactac 180  
 tcattgatct tcaattatat ctttcggagt agtttgcac ttgctctagt acttcactta 240  
 tatcttttag agcatggtgg tagttttatt ttgaataaat agatgaactc tcatgcttca 300  
 cttatattat ttgagagtc ttaaatagca tggtaaattg cttaaaatcc taagatgtta 360  
 ggtatacaag attagtaaaa aacttcctat gagtggtttc aatactaaga gaagtctgat 420  
 gcatgatgat tgttttgaga catggaggta ataata 456

<210> 4902  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-004-Q1-E1-C5  
 <400> 4902

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 gatcgacacc gacggtgacg gcttcacga cttcagcgag ttcactcct tctgcaacgc 120

caacccgggg ctcataagg acgtcgccaa ggtcttctga atcagttcat ttcacctcag 180  
 ccgtccgttc caggagccga tccatctacg tacggcttcg tatatcaatt tcatgcaact 240  
 acctactccg gtcccgatcc agcctcagct tcacctgagg ccggccctaa atttgtttga 300  
 tcaattcttt tgctactagt agtaactagt gatgatcact gttgcatcat ttattttattt 360  
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<210> 4903  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-C6

<400> 4903

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 tattttacct aagatagagc agcagcagtg attagctagc tagaaatgag tttgaggatg 180  
 atgatgtgct acgctattac tatgatgata aaatagcgag tgttggtagt aatgactatg 240  
 atgattatta ttagctagtg ttagtggtga ttaaataaat attgttgatg gtaatggcta 300  
 tgatgatgat taaatagctt gtgctggcgc attagattca agtggaggta acatgtggtg 360  
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 atgcaccaca tattgcctcc acttgaacct aatccacctt ca 462

<210> 4904  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-C7

<400> 4904

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 tgctcctttt acatgatgat tactattatc ttaatcttag tgcagtgtga tgtaatatgc 180  
 accatgaatt ggtagtgcag tgcagtgcag cacagcacat ctctgaacct gggaaggtag 240



tactagcttt cttttcactc agacaagtcg ggaggggggtt tcttgtcagt tagtcggttt 300  
 ctggcttgtc agttactgtg gtgcgtgtcg tgtggatcga gttagttgta ctaccagaaa 360  
 ttcgggatga caggaacca tgcatt 385

<210> 4905  
 <211> 219  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-C8

<400> 4905

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 ttgtcgtgat ttgccgattg gtactctata tgtttgcaa ataagctgtg caccgtgtgc 180  
 acctttggaa cagtgaagta gtaattattt tgtgagctt 219

<210> 4906  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D10

<400> 4906

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 catcgccgcc gacctgcca agacggccac cggcaagatc cagcgccgca tcgtcgcgca 180  
 gcacttcttc gtcgtgcccg ccgcgcgcgc caaggcctat aagagctcgt cggtcggtcg 240  
 atcgatcacg tcgccgtctt ttgtcccttt tttttacgtg ccagacagaa caggggattg 300  
 ataatgaaat tgccgcccac atgacattgg agagcggtaa aagttgtggt tgatttgatt 360  
 gatgaagatt aaaaaaagac aaccaacaaa aaacaaaa 398

<210> 4907  
 <211> 329  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D5

<400> 4907

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gaagtagatt atgaagagga ggaatatgaa gaataagatt gagattaaga agatgaatat 180  
taataattat tcgaagatta tgaagaagaa taagaagaag aagatgatga tgaagtagat 240  
cgaatatcaa gacgactgat aataataata atgagaagat cgtgacttcg aagatgaaga 300  
cgaagattag gattgataag aagacgaac 329

<210> 4908

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D7

<400> 4908

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caccagaacc cgtccgtccc gagcagcgac ggccatcagc agacgcagga ggtggagttg 180  
gggactagta cgaagcgaga cgacggcgac gtcgagagcc aggcttccat gagatgacca 240  
ctttcccttt ccttggagag agttaacctc aggacatcat ttgtaaatcc acagcatagc 300  
tgaattcaca taagctgcca gctgacttgg ttgcaacgaa caaaaatgat attttgttct 360  
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<210> 4909

<211> 371

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-E1

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acctatgaac ctgttttcct ttgcattgtc tatctagatc taggcatgtg ttcacttagg 180  
 ccgaggattt gtcattggta tgtttttaga tcggtgaggg tgtggtggac ggaggtggcg 240  
 tttgcttttg ccagaaata atggtgttat tattttggat ttaaagagg aggtgtgatt 300  
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<210> 4910  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E5

<400> 4910

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 gccatggacg cgatgattcg ggagcagagc agcttctgtt aagaaataaa taaagaggat 180  
 cggtgctcga caatgttgtg gccgtgtgtt ggggtgtgatt gtttgtttgt tgcagtggct 240  
 gcattcactg gctgggcacc aggatctata agataatgtg tacgtacgta cgtactgtat 300  
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<210> 4911  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E6

<400> 4911

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 gagtaagtgg ttcattatct tgcttgctac atgcttattc cggttgttat ttattttgct 180  
 tgtcacatgc taatagttca ttcttttgca gaaactggat atattctaaa ggggtccgta 240  
 ttcccaacgg cctcatcacc gtcttgctga agttatattg gccgggggttg tactgtccgg 300

attcagtcag gcagctggac tgtcggggttt tggccacgag ctgggaacac tgggaagcgg 360  
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<210> 4912  
 <211> 471  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 4912

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 tttttgctaa gaaggcgctt cggttctctc tttgacgtga tttggcctag attgggagta 180  
 ccaaaagaga acggggcaaaa ataaaagata agtatgaaag aagtattcat gaccagtga 240  
 atggccgaga ggtggaataa gagacatctt agctcgaagc atggggccaaa gctgactctt 300  
 gctggtgaga cccgtatttt ggtccttgat acttttaact gactctcatt ttcagggaaa 360  
 gcttagcagg aataaatcca atctaacttg agggataatg ttggggatac tccccacggg 420  
 cgagacatan agatctatat attggaagcc tatgtttgga catcagaatg g 471

<210> 4913  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-F3

<400> 4913

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 gctttgtgat gaagttggag cataatttat ttattgattg tcttccttat gagtggcggt 180  
 cggggacgag cgatggtctt ttctaccaa tctatcccc tatgagcatg cgcgtagtac 240  
 tttgttttca atggcttgta gatttttgca ataagtatat gacttcttta tgactactgt 300  
 tgagtcgctg gagtatacgc acgctcacc ttccaccatt gctagcctct cttgtgcgcg 360

gcaacttttcg ccgggtacat acaccaccca tataccttcc tcaaaacagc caccgtacct 420  
acctattagg gcatttccat agccatt 447

<210> 4914  
<211> 295  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-004-Q1-E1-F5  
  
<400> 4914

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tttgagtaca acttccttga ggatgaactg tcagtacagc catactaagg caccattgcg 180  
gatcaccgtg ttcgatcaaa tacgactcgt gtaattttca caatggaact gctggtatcc 240  
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<210> 4915  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-004-Q1-E1-F7  
  
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gatgaaatac cagagattgc tgcagttgaa gctatcacgg acaaggacgc tgggcttaag 180  
ctgaacgaag agaatgttga gaaggctact gatgagatca ggccatacct caccggtgca 240  
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ggccctgcag caagtgtggc ggccgtccga gttgctatag cacagaagct caaagagaag 360  
atcccatcca tcgcagctgt ccggetactg ccgtaaactt caactgcana acattgctgt 420  
gaatatctgg ttatccagga gaatgctatg aatgcgctaa ctga 464

<210> 4916  
<211> 461

<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-F8

<400> 4916

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agctgcatgc tgtggatctt ctacgcgctg gtcaagacca actccagccc gctgctcacc 120  
atcaacgcct tcggctgcgt cgctcgagggc ttctacatcc tgctctacgt ggtgtacgcg 180  
cccagggccg ccaggcaccg cgccctcgcc ttcttctctc tctctgacgt cgccgccttc 240  
gccctcattg tctccgtcac cgtgctcttc gtgccccagc ccagccgcgt caaggctctc 300  
ggcagcgctt gcctcgctt ctccatggcc gtcttcgtcg ccccgctcag cgctcatctc 360  
gtggtgatta agaccaagag cgccgagtag atgcccttct cgctctcctt cgctctcacc 420  
ctcagcgccg tcgcctggtt cttctacggc ctcttcacca a 461

<210> 4917  
<211> 469  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-004-Q1-E1-G1

<400> 4917

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cagcgagcgt gccacggcgg tcgctcgtg gtgaaggcgc gggaggtgtg gctctcatcg 180  
aggccaacga cgacgacggc agtcggcgtg acaagatggc atttgcggcc gtctgcgtgt 240  
tgcatcgatg acgtgaacaa tcattggctt caagagagaa ataagttaac aagattaggg 300  
agggtgaatg tagaactaat cttgttatta gtgcgtacga ttagatatgt ttatatcatg 360  
cttgtagttg agctgcggct gtgtgcacac gtcaggttgt gttcagtgcg caaggcanag 420  
ctaattatgc atggtagtta gatgcatgcg ttaaagctcc gcgagtcgg 469

<210> 4918  
<211> 437  
<212> DNA



<400> 4920

gtaccagtcc agaattcncg ggtcgacggg gaagaagaag atcaaaagag agatcaaaat 60  
actacagaat ctctgtggag gtccaaatat tgtgaagctg cttgatattg tcagggatca 120  
gcattcaaaa acaccaagct tgatctttga atacatcaat aacacagatt tcaaagtgc 180  
atatccgaca ttgacagatt atgacattcg ctactatata tatgagttac tgaaggcttt 240  
ggattactgc cattcacaag gcattatgca ccgagatgtg aagcctcaca atgttatgat 300  
agatcatgag cttcgaaaac tccggttaat agactggggc cttgctgaat tctaccatcc 360  
tggaaggag tataacgttc gtgttgcata aagggtacttc aagggtactg agcttcttgt 420  
tgactttcaa gattacgact actctttgga catgtgg 457

<210> 4921

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-H3

<400> 4921

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gggctacaac tccctcaaga acttccgcga gatctcccc gccgtgcagt cccacctcaa 120  
gctcgtttac ctgacctat gctttgccct ggctcatct gccgtgggtg cttacctgca 180  
cattgcctg aacatcggtg ggatgctgac aatgctcgcg tgtgttgga ccatcgctg 240  
gatgttctct gtgccagtct atgaggagag gaagaggttt gggctgctga tgggtgcagc 300  
cctctggaa ggggcttcgg ttggacctct gattgagctt gccatagact tttgaccaag 360  
tatectctg acagggtttg tcggaaccng catcgcttc ggggtgcttct ctggcgccgc 420  
catcatcgct aagcgcaggg agtacctgta 450

<210> 4922

<211> 467

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-H5



<400> 4922

gtaccgagtc aggaattccg ggtcgacggg tggactactc gtagctaccc gaaccgcaac 60

tcaaagaatt ctgacaagac atccatcttc cttgatacgg acgctccacc actagggaac 120

ctggaggtaa agagaataat aaagaaacag agctcgcatg aatgtatttt ttccttactt 180

ctacgtatat cctgtacgca tgaaggacaa gcttgacgac gtgtcgccgt tcgtgcctat 240

gagccgcggt atggaacaac tcctagacga ggtgatggaa aacatggacc aagatgagcc 300

gtccacaaaa tccgcacctc tggccaagtc tagttcggtg gcgatgcaca cgcgcccgcc 360

aatgagtgat ccagctgcga attcttcaac tgtggcaggg agcaatctcg tcgcaaaacc 420

cgctccctg gtgaccaagc ccgctttctt taacacatca acaggca 467

<210> 4923

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-H6

<400> 4923

ttcccgggtc gacggggcggg taacttttagc aaagaacacc acaataagtg aagcgagaaa 60

atagatgacg acttaccaag tttgggggat tgtacacgga gaatccgtcc cgcggtttga 120

tatggaggaa gtctttctct tctcctttgt acaggtcgga tagtatactt gccagagcgg 180

tgggggagtc cggaccctta cggccacagc gcgtggcatc gtctgtcccg ttgtagtgcc 240

acatgggatt gctccgatat tgaagtgggt gcaactcccc cattatgcat attgccatca 300

cctcgactat cgtcagtcag gatttgcca gtaattttat cctgctcatc aggaaatgta 360

cttccttgca atcctcctct tgggggcctc gggggtgcca gcttagacgt gccctcggcg 420

gggtgttaca gaacttgggg agtcctatcc ggact 455

<210> 4924

<211> 465

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-H7

<400> 4924

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 gcgaaaaggc ttattcttcgc gttacaccaa tgaaggggtgc tcaccgcttc gggatcaagg 120  
 gcaaactagc tcctcgctat attggccctt tcaactattct ggaaaggcgt ggaaaagtgg 180  
 cttatcagct ggagcttccg ccgaaccttt ctcaggttca cgatgtgttc cacgtgtcac 240  
 aactccgacg ctgcttcaag gacccaatcc gagcagtggg ccatgaagtg ctccaattgc 300  
 aacaggacct ctctataaaa gagcatccgg tccgcattct cgaccaagct gaacgccgca 360  
 cacgtcagaa ggcgatcaag ttctctaaag tccagtgggc gaatcactct gaagacgaag 420  
 ccacctgnga acgcgaggat cgtctacgag atgaatatcc cgcac 465

<210> 4925  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-004-Q1-E1-H9  
 <400> 4925

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 gaaaggccac ggaatgacat gcaagcaagg gccatgtacg agtccttat ggtaagtttc 120  
 ttctgcagat tagccaaaac attcatgtag tgtttgtctc attactaagt agtatgactg 180  
 agtcgtcaaa accaaatgtg cagtctgtgt gcgagaagac aggtcagacc gtcgccgca 240  
 tgccagtgat tgttcctggg accacggtga gttttatttg aatggaaatt acttgctagt 300  
 cttaacattt gagtgtcatc atgctaaca gacattggaa atgatacttg gtgcagcgta 360  
 actccagaca agcatcgcac gagccttctc cagcttaaga catgagccac cccgctccta 420  
 cacctcctgg atcttggtg 439

<210> 4926  
 <211> 253  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-A1  
 <400> 4926

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 cgcgccagaa aagcttaccg cactggacgc tgctcgacgg ctgaactaag tttagcattg 120  
 ttgaagcata tctagtcctc atccgtgact agtgtgcaag cagactgtgg cagtttggct 180  
 ccagttgtga aagtcatttt tgtttgtctg agacatcttg gaaagaacag tgtaggaatg 240  
 aagtatttct gtt 253

<210> 4927  
 <211> 228  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-A12  
 <400> 4927

ttccctaaag tgagtcgtag tattccttct aatttgcttt tactttttac ttgcatctc 60  
 tatactatca tatattattt atcatctcag tcagatctca ctttcgtacg ttaccgatat 120  
 tggattgaca acccctaagc acgttggttg cgtaaatcta ctgaactttg tgtacgtacg 180  
 agggactcca gcgttgccctc ctactgggtt gttactttgg ctcacaga 228

<210> 4928  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-A7  
 <400> 4928

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 agaatgagtt cattacagta cattaaagta gtcttttggt ttctttctct aacggagctc 120  
 acgagatttc tatcgagttt tgtgttggtg agttttcaag ttttgggtga attcttttga 180  
 tggattatgg aacaaggagt ggaaagagcc taagcttggg gatgcccatg tcaccacaa 240  
 gataatccaa ggacaccaa aattcaaagc ttggggatgc cccggaaggc atcccctctt 300  
 tcgtctactt ccatcggtaa ttacttga gctatatttt tattcaccac atgatatgtg 360  
 ttttgcttgg agcgtcttgt attatttgtg tctttgcttg ttaatttacc acaatcatcc 420  
 tttct 425

<210> 4929  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-005-Q1-E1-A9  
  
 <400> 4929

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 ggggttcgggg ggaacgtggg gcacgaccog catgtcctct acacgctcag cgccgtgcag 120  
 gtctcttgcc tcttcgatcg gctcgatggt catgatgcag acaaaattgc tgactatatt 180  
 actggacttc aaaatgagga tggatcattt tctggtgata tttgggggga agttgatact 240  
 aggttctcgt acatttccat atgcaccttg tcattactgc atcgtctgca caaaattaat 300  
 gtggaaaatg ctgtacaata tattgttagc tgtaagaaca tggacggcgg atttgagct 360  
 atgccaggag gggagtctca cgctgggcag atattctgct gtgttggtgc tctcgcaatc 420

<210> 4930  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-005-Q1-E1-B3  
  
 <400> 4930

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 gacattgatg cgacgctcta cactggtctt gttgtatggt agtcagtgtt aagtttctta 120  
 atgtcatttc atatatttat cctttccatt ttgagtcgct gaaactgctg agtgatgtgc 180  
 agtttgctct gttggctgct ctgtcacttt cacgtttcat attctttggt gtgtagttcc 240  
 tcatactgct ctttcttcct gagtctcgga aagaataata aagagccatg tgtaattcta 300  
 ttgcactgtt ctcccaaaat tgtcattatt ttaagcagta ataataataa taactctgta 360  
 ccaagtctca gtaatacctg aagttgatcg aatc 394

<210> 4931  
 <211> 252  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B5

<400> 4931

aattccccggg tcgacgggga acaaacttgg tctctgtgtg cttaggatgg agtccccgcat 60  
 ttgcttttgag aactgtaagc gtgtttaacc tgacagcgcc tgtaattgta ggccctttcc 120  
 gcataacttca cagcttggtg tcttatgagg tgctgcaggg cagcaggctg gtttatgccg 180  
 cctcggtcac tattatcatt tgtaacttgt tagagtgcac attaattctca ggaggacata 240  
 gacataatac tt 252

<210> 4932

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B8

<400> 4932

attccccgggt cgacgggtag taccattagc tgagaaaact atggcgggac ccttggtgta 60  
 tcatcatctt gtactaccac cagccagcag taataaagtg gcgcctatga agaataaagg 120  
 ttgtgccatc tccaagaatt gttatccttg tatcatgttt gctgctgcaa tgcaatgcag 180  
 atgtagtggg aacttgccctg cttctttttc atgctcccat ccgtgcttcc tcatacatgg 240  
 cctcttgaaa gaaaataagc cccggtccca ttccctgaaa atcaggggat gattagatta 300  
 gaaaagaaaa agaaaaaaga acagccgtaa gatgaagtga gagcacggat gcatacatgg 360  
 cttgatttga ttggaagaaa ataaagtccg gcaacact 398

<210> 4933

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-C1

<400> 4933

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 gccttggaag agctcatgga cggaggagcc gaaggggaag ataggattag gaaggttcag 120  
 gagctgaagg cgaaagcgaa ggctgctttg gagaacggcg ggctcgtcgtg catgaatctg 180

gacaagctgg tccaatccgt cgtctgaaaa ttagcgcagc atgtcggccc tgaataaatt 240  
ctgctgcttt cgctcattga tgaacagatt ggggttgttt cttgcttgct tggaagatcg 300  
agagtgaaaa acatatccta tgttgtaagt tgcaactgta tctcatgcca actcagtcta 360  
caagtctctt gttaggcgct gcctgcttcg taaaaaaga taacgaagct ggcagctgct 420  
ctaacac 427

<210> 4934  
<211> 307  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-C10  
<400> 4934

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ctgaaccacac tacctacatc aatgctccct tggtaggggt tcttgcttac ttcgttgcca 120  
acccaaaccc aggccatata agacactgag cataagcact ttgccatgta gatagagaag 180  
agtgacagaa gctataaata ggtacacagg aagcaaata gcttgatgatt ggatggcact 240  
acatgttcat aggagtggat tgcagagcat gtgttctacc aataatgaga gcttatcttt 300  
catgatt 307

<210> 4935  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-C2  
<400> 4935

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ctgctgggtgc tggtaggtagc ggcggcgggt gtgggtggctg cggtaggtcgc gttccaccgg 120  
aggccaaccg cagaactcgt gtcgcccctt acccgcagcc ttcgcgaagg tgatggacgc 180  
gccgggtgctc gtgacgtgca cgcaccgctg cgcttgtagg agagagatca gagcaagaag 240  
agagcaacca gcgtgaaaaa aaacattagc aaatcagaat tgttgctcga tccccttggt 300  
ggggtgggta caacttagtg tttagatcat cgttgatgac aattgacgcc gtogatctgt 360

ttaattgtgt tcctttggct ggttgggtgct tcagtcgcag ccaagaattg gcgtgga 417

<210> 4936

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-005-Q1-E1-C6

<400> 4936

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gacgggggagc acaaggaggg catgatggag aagatcaagg acaagatcag cggcgacggc 120

cacggcgacg gcaagaagga cggcgaccac aaggagaaga aggacaagaa gaagaaggac 180

aagaagcacg gcgagggcca caaggacgac gacggccacg gcagcagcag cagcgacagc 240

gacagcgact gagccagctc cggcccgcgc tccggcagcg tgcaggcgag atcgatgatg 300

aacacttggg agaagtgtga cagacatata tggtgcaggg tttggagcgt gtggtagcat 360

atgtatgtaa tgcgtgacat gcctcatgga tcntgtgatg tataataatt agccggccgc 420

actgcactga acngtgcctt gtaataat 448

<210> 4937

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-C7

<400> 4937

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attcaattga gtatggttac cgggtcccct ttggcagcgt acatgtcttc atcggaaga 120

tcggtgagcc tgggactgag ccggacatct acaccgaccc cgtcgagacg gctcagcgtg 180

cgagatttac tcagggtaaa ccggccatga agtgtgcctt cgttgagtc atctacggag 240

gagagcgca ggacgaatca gagcacgaca acgagaccgt cgtctattct ggcgacgagt 300

cctcgaccgg agagaccgag tcgctatacc ggatgcaaga cgatcagggt aggggttgtt 360

ccgatggcga tagtattccg gacccccag gccagatcaa ccggg 405

<210> 4938  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D10

<400> 4938

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 ggaagcaggc gagcaagttc aaggagcagg tcgccaagca gcagcaggct gtgataaaac 120  
 aattcagcac tactggttac gagcgttcag attctgttgt cattgatgaa gttgaattac 180  
 agcaacatca aaggcttgag aaattgtaca gttctactcg ttctggaagg gatttccaaa 240  
 aggacatagt tcgagcagct gaaggcttgg tgtctattgg aagcaagcat attgaagtgg 300  
 gaacaaaatt ttctgaggat tgctatagat atggagggtga aaataatgct gatggtgaag 360  
 ctcttcaaaa agccgcatca ctgtatggag gtgctttgag aaatgttgaa aaagagtatg 420  
 aagatttcaa tagaactt 438

<210> 4939  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D11

<400> 4939

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 ccaactagaa acgaaaaata ttttaaatta gattgttttt ttgagacaat ctgcggaac 120  
 tttatttaaa ccaaaccaat gttcagaggt acaaaagaaa gatcaccagg gtgtcctaatt 180  
 caaacatggc ggcccatcct taactttaaa ctatgcttcg ctagattatg agccttgaaa 240  
 ttcgaactcc taaactcata aacaaagcta catctactaa aagaagagtt ttgatctatt 300  
 atttcatgta agatcccaca tgctggcgtc caactgggct gaccattag cgtgaagttc 360  
 acacgtagtg cacagtagct actcgggtca tgctgattgg aaatatcact atag 414

<210> 4940  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum



<223> unsure at all n locations  
<223> Clone ID: LIB104-005-Q1-E1-D2

<400> 4940

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tatatatcaa gtatactcca tatatagata tatgggtatgg aagcctatcc occatataag 120  
ataagacggg gggataaaaa gaagggaaaa tgaaaatagt taattaagtt cagaatggta 180  
ttccataaag gaaaggaatt ccaatcaaaa caaaaaatac tgagtctctt aaacaagaca 240  
ttctaaaact taggtaatth atagtcatta ggatttttagt tctatatgaa gtaaggacta 300  
ttcgataatt tcttataaac ataggthttc attggaattc actcaatcag ttaattatgg 360  
aacaagagag ctgtttcatc tttgtthttaa agaaatataa aaatgaatta tgaatagaaa 420  
gtanaatgat tcaactthttt thtt 444

<210> 4941  
<211> 422  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D5

<400> 4941

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ccgagatccg ccggtthttca caccgacaaa gatctaaaac ttattgatgt gtcccttatt 180  
aaatctthgt tttgcaatat gaatcttgat gaaactgaat atgatcttcc tttacctaga 240  
aggcattcta agaattcgga gtttctagat cttgatgatg aaattgatga aagtgggatt 300  
gaaaaacaat aaaaacctag atgttgctaa acccactatt ttggatctca aggaatttaa 360  
ttatgaaaat tgctctthga ttgggtgtat thccttgthg caatccgtgc tagattctcc 420  
tc 422

<210> 4942  
<211> 455  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-005-Q1-E1-D6

<400> 4942

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ggcatctcga tgacgagggc gtggctgctg cgttcgttct gggccaacag gtaagtgtc 120  
tagcccattht agtgatccat aggtatatag gcttatcaga aatcccaggg tgggccgcgg 180  
cccaccctgg ccaccctgta gctccgcccc tgacgggata catgggtagg gacttcatgg 240  
aaggcggact ccatttaatc ctttctagct gcttactgaa caccaagccc tatttgatat 300  
gttgaatgat tgttatatag gtgaaggaat cgacgaagaa gcttccgttc agcatgctat 360  
gtcaatggaa gaatatctga agcagacctc tgctacttct ctattctctt tcattcgtcg 420  
tgggcagccg aattggttga aataattatg ggcag 455

<210> 4943  
<211> 312  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D7

<400> 4943

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gtgaaatatg gggcttgacg catcaatgcg atcaaaccct acgtagaatg acatgagact 180  
ctcatagctc gtcatacaag ctcaccacat cacagatcag aggacgtcat tgaacgaact 240  
gacaactgtg atggaacgag agttacccca tatgatcacc atgcataact tggtcattc 300  
accacgtgac at 312

<210> 4944  
<211> 429  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-005-Q1-E1-D8

<400> 4944

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ccatttttaa tccgctgctt tattttgttt tcatgaaatt aagaggcaac tttatatatta 120  
tcctggctag gttggtttat tcagttgcta aaacgagaat gtacaactta gttatttttc 180  
tagatggcta gaaaatagtg gtatcaataa atcttattag gaatttccat catacttaat 240  
agacgtacaa acaatttgat tttttttttt gtgaagtaca cattgtttcc aatgtttgga 300  
ttaccgcccg tanatggggg gcctaccgt tggctcttga gaaaaaacga gacatttctt 360  
aactactctt tttgtagaac taattttgtg caatctttca tttttaaacg gaatgcatta 420  
cacattttg 429

<210> 4945  
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<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 4945

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ttaggaggaa gccaaaggcca gccgtgcggg tgacgacgag gtaattgttc tttcctccgg 180  
ctcagagtct gtgccaaaac agaaaactcg tcaggcaagc cggaaagtaa ggttttctca 240  
tcctttggct tatttggatc ccaactttat tttgaaaaag cagcaacatg aagcttgccg 300  
cacgaccggg aataggggaa gcgggatcct ttcctccggc ttaccgaaca cccagcccc 360  
tcacaaacgt cgtccagagg tctcaacaaa ctctgactta acttatccca aggccggtct 420  
nttacgacaa cctcttaacc cttca 446

<210> 4946  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-E11  
<400> 4946

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ccactagatt ggatttcagg acaaccagtc gcagatgagc atgaacgcct ccagattata 120  
aagaatgatg acctcgaaga gtcceaagaa ctcggttctg gaacttttgg aactgtatat 180  
catggtaaata ggaggggctc tgatgttgca ataaaaagaa tcaatgacag atgttttgct 240  
gggaagccat ctgagcaaga aaaaatgcgg aatgacttct ggaatgaagc atctaacctc 300  
gctgatctgc accaccccaa tgttgtggcc ttttacggcg ttgttctaga tgggcctggg 360  
ggatccattg caacggttac agaatatatg gttaatggct cacttaggac ggctttgctg 420  
a 421

<210> 4947  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-E5  
<400> 4947

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ccgaaccag tggaggacaa cgcaacggcg gcaccgtcac aaccaatggc accacctcaa 180  
ccattggcgg aaaacgcaac ggcagcacca ccgcaaccaa tggcgcgaaa gcgcatctgt 240  
cgttgtggtg gtgccaccac caccgccaga cggcaccacg acattcctct gcctcactct 300  
cgctttcttc atccctcccc tcggcgtttt cctcaagtac aaatgtgaga ttgaattctg 360  
gatctgcctc atcctaacat tcttggccta cgcgccgggc atcatctacg ccgtctgggt 420  
gatcctg 427

<210> 4948  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-E8  
<400> 4948

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cttgctact tcgttgcaa cccaaaccca ggccatatca gacactgagc ataagcactt 180  
 tgccatgtag atagagaaga gtgacagaag ctataaatag gtacacagga agcaaataagg 240  
 tttgtgattg gatggcacta catgttcata ggagtggatt gcagagcatg tgttctacca 300  
 ataatgagag cttatctttc atgatttttc ttttgtttgg gtttgcactg aattttgttt 360  
 tgtgtgaagg tgtgcacagt gcagtttaac tgcactggtg tagtcatgag tgaagaaagc 420  
 ttgcattttg cagaaatatt tggat 446

<210> 4949  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-F5  
 <400> 4949

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 atatagccca accctgtcgg tgtgaccgag tggaacaact cgggtggcacc gagattcata 180  
 actgcaagca gttactgaaa cttggtgtga ccgaaagggtt caaatcgggt gcaccaagat 240  
 tgagaacctg gatcgactta gtgatctcgg tatgaocgaa ttggatgaat cggtcagacc 300  
 gataagcaca aagaagtttt ggaagtttaa gtctatgacg aatcggagac tccgagtgtt 360  
 cctcacacag agtggttcga atcttacttg atcaaatttt gtgatgtagc atgaatagag 420  
 tttgagac 428

<210> 4950  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-F7  
 <400> 4950

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 tatctttggt gctgtccttg aggccgctgc ccaggcttat ggcaacgacg agagcatcga 180

ggtcattgctt gaagagcttg ccagtgaccc agagctcgtt gatgagtaca tgaagcttct 240  
gctggagcag gtcggcgaga ggggtggagtc cgaatccgag gccaaagacgc agtcgtgaag 300  
cgtggcccgagg agtcgggtcc ggtcgggtcaa gtgggcggtta catttcaggc gcggcgtggt 360  
tgacaatgtg gtgaaaacat atatacagaa ctcatgactt gtggatgtaa ttgtgtctcc 420  
tgactgtgga tgggtattgt 439

<210> 4951  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-F8  
<400> 4951

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gctctcatgc ttttgcttca taatttgcag atatgaagga agatgcgggc tccctaccaa 180  
ttttgattcc agctattgct atgcattagg ctatgggtgt ggtgtctctt tccaatttgg 240  
caagacagga cttatttctg cgggtatgtc actatatttt tctacttgat agatgttttg 300  
cattgcttaa ccatcggagt catatttact ctgtttacct cctaacttct gaccagttct 360  
ccatcatgcg aacattgtca tatgttctct tccagtttcc acgccatatt cattattgga 420  
taaaacatta aatttcacaa aacaaaca 448

<210> 4952  
<211> 440  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-G5  
<400> 4952

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tggaccactt caggttcctc cactccaacc tgggtcctca gccaggacgc tcttagctat 180  
ggttttctcc cagaatgtct cccctgtagc accaaacttg ctactgcagg ttgcagtga 240

gaataatcag caacctgtgt ggtatttcag tgacaaaggt tcgctccatg tcttctttgg 300  
 tgaagatggc aaaatggagc gaacgggttt tctcgaggcc tggaaatctt tacctgatga 360  
 caatgaattt tcagaagaat accccaattc tgtcatcagc agcatagatg ccaccgttga 420  
 acaccttgca gcatcaaatg 440

<210> 4953  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-G7  
 <400> 4953

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 acgttgctgt tctcttgctc tgggtggagaa ggagggtgtt gatgttcac tgggtgtact 180  
 tcctcatttt cttcgtcttg gtgtgtccca cttgtggatg cttccgtatt aactcttggt 240  
 tcaccttgct gtgaggtaga agcttccact tggacagacg aggtactctc cttcacctcc 300  
 gttggacgaa ccttgccaat agacaagtct tggattgctt ctgaagggtc tttgtctcct 360  
 acatcaattg gcaattgctc tatttgcgag cgttagatt cgtcaaactt cacatctact 420  
 gtct 424

<210> 4954  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-005-Q1-E1-H5  
 <400> 4954

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 gggccggacc tgatctgggc cgtaatttgg ccagaacat ggtaggcttt taacgggtgg 120  
 atctcatatg ggccactatt agggccggag catggcaggc cattaatgga ccggatcaaa 180  
 tatgggtcgg catttgggcc aaaacatggt agccagttaa tgggcccgat tactagggtc 240

ctcaaaatct tgtgggccta cagctgggcc ggcccattaa tgtcggtgaa atctcgtggg 300  
 cctttagcta ggccggccca ttatgatccg caagaatctt gtgggccttt acctgngccg 360  
 gccattatg gcacacaaaa atcttgtggg cctttacct 399

<210> 4955  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-H7  
 <400> 4955

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 tagagctaatt cttgatattt gtattagcat gtttgagttt tgcattgtagt ctatgtctagt 120  
 gtgggtgttcg tccgacgaag gctttaggtg agcgcgcca agaggatgaga tgccaggatg 180  
 ccgtgtgagg cggcgagcat ggcgagatgc cgatgggtgct gcgtgagaag cggcaagacg 240  
 tatcagaggc tggagccgtg atggactgca tcaaattggg tcgggtgaac cggccgggtcg 300  
 ttctgtttgt tggactagct gttcatgcgt gagttcgttt agtcctagcc gagagtatcg 360  
 ttgctagtag ttgatgcatt catgtagttg gcctgggtcac aagtgggttac cgagtcgtgt 420  
 gcaacgctgg ag 432

<210> 4956  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-A1  
 <400> 4956

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 aagctgttga tgtcaacatg aacaaaatgc cagatgtcgc gatgactcta gccgttgttg 180  
 ccctgtttgc cgatgggtcca accgctatca gagatgttgc ctctggaga gtgaaggaaa 240  
 ctgaaagaat ggtcgcgatc cggaccgagc tgacgaagct gggagcaacg gtggaggaag 300  
 gcccgacta ctgcatcatc acgccgccg agaagctgaa catcacggcg atcgacacct 360



acgatgacca ccggatggcg atggccttct ccctggcggc ctgtgctgag gtgccagttc 420  
 acatcagga ccctggatgc aaccgaaag aaccttccc 459

<210> 4957  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-A10  
 <400> 4957

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 atttggttga aactatgcta tttatttggg tgtggactat atgtttgctt gtgaaataat 180  
 gcaaaatttg tgtatgaagt agtgcaaaat ttgtgctatt tgttgaaaaa gggcggtcag 240  
 ccgaccatgc cggcatatat gggtcggcgc gttgggcaca ctgccgaccc aaatctcaaa 300  
 tgggacggac gccgagcggg tgaccacca aacggataaa aaacggacaa aaacaccgtc 360  
 cgtttggtcg gcgcgttga gtaactagtt caacttctcc gaag 404

<210> 4958  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 atgtttgacg aaagtttga cacacacccc tcacaaaccg gagcaactca ctagaaggct 180  
 cgtggttccg aaagggaaca atgcatgttt gatgacgaac aggagatagg ttcctcttac 240  
 ggcccttcaa atttattcta ctctaacgtt cactattaca actgtactgt gaaaatttgg 300  
 aaaattctaa gggtcatttg accttttaaa gacatttaag tgattttcaa gccatttaat 360  
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 atcatattt 429

<210> 4959  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-A2  
  
 <400> 4959

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aacgacaaac ttgttccagg ttcttccttc tttacaattc tacaatacat ctttaaaatc  120
agcatcatgc acatattgat ctttgatggc ctccaaacca aatattttga agtcaagttg  180
tgaaagcata gtatagcgac gagacaatgc atcagcaata acattttctt tacccttctt  240
gtgtttaatg acataaggga aagtttcaat gaattcaacc catttagcat gtctacgatt  300
cagtttagct tgacttttaa tatgtttcaa agattcatga tcagaatgta taacaaattc  360
tttgggccat aaataatggt gccatgtttc taaagtccga acaagagcat aaagttcttt  420
atcaaaagta gaataa                                           436
  
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<210> 4960  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-006-Q1-E1-A6  
  
 <400> 4960

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cgctaataaa ataatcttag atggatatca cctgatttgt tcggatgacc gatgatccat  120
tcaacgcaac agaaaacagc tcaggtagac cggcaaccca aaatagcccg gcggcttatac  180
atagcagtgg cggtcaatg cggccccggt gaattaatac agcagagggg ctcaatggtg  240
cgcatttttt aacttcgtcc gtttttttta aatctccaga cacgtatttt tgcaccatag  300
tttcgtgtag ctttctgatg tccatcttga gccggacaga taaatagtag taacaaagta  360
ttgccagtaa tggcagcgca cactgacgga gctgactgct gacgcgaccg cagtccagag  420
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<210> 4961  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-A8  
  
 <400> 4961

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 caccatcatg ttggtgccat ctactgtaag ctgtattggc agctcggata ttctaagggt 180  
 gcctgaattt atgttttagta tgacaacaaa caatttccag tatgcatgcc taccatata 240  
 atgttaatgg gctgtggggc gattaccggt aacatgcttg gtcttggtgcg acctgagaat 300  
 ccctgcctca cacactogac gaatttagcc catgcatctg gtatctagat acaattactc 360  
 ctacaaatat tgtttctata gttgtgatct aaatgct 397

<210> 4962  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-B10  
  
 <400> 4962

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 gggatgccca tggcaccccc aagataatcc aaggacacca aaaagtcaaa gcttggggaa 180  
 gccccggaag gcatcccctc tttcgtctac ttccatcggg aatttacttg gagttgtatt 240  
 tttattcact acatgtcatg tgttttgctt ggagcgtctt gtattattcg cgtctttgct 300  
 tgttcgtttt ccacaatcat ccttgctgta cacacctttt tagagagcca tacatgattt 360  
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<210> 4963  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B11

<400> 4963

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aggaccacca ggacgagatc tgcgaggtgg tgctgaccaa gagccccgac gcgtcgtgcy 180  
ccgagatcga ggagttccgc gaccgcgcgc gcgtcccgt caccagcaac aacggcatga 240  
agcagcaggg caccgccttc gccaacccca tcgccttctt cccaaggag ccgcgcaagg 300  
agtgcggcgg catcctccag gcttacgacc tcaaggacgc acccgagaac ccatgaaccc 360  
ccatcccatc catatagtct cgctcagttg cttcccatca tca 403

<210> 4964

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B12

<400> 4964

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atgaaggacg tcgccaagggt cttctgaatc agttcatttc acctcagccg tccgttccag 180  
gagccgatcc atctacgtac ggcttcgtat atcaatttca tgcaactacc tactccggtc 240  
ccgatccagc ctcagcttca cctgaggccg gccctaaatt tgtttgatca attcttttgc 300  
tactagtagt aactagtgat gatcactggt gcatcattta tttatttatt ttatatatca 360  
tcacaagttt cctgtgattc ttttctttct ataccttttt gt 402

<210> 4965

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-C3

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ctgccattgg aaaaatttgt aactttttga atgtttctag tatttgtttt gatttgtttt 180  
ttatttaaca cgggtgcaga tgagctcggg ctcacaaaag catttctcaa agtctgggtct 240  
ctaaatctgg gcagtgtttg cgttattgcc gctctaggac tttgcttccc tatctctgtc 300  
ttcctttcgt ttcgttttct tcaaagtcag agaaagagac tgggtaaaca aaccaaaaat 360  
tttgcgcttt tgactggaat tgtgataggc acgtttcaac aagcagggca taaacaaaac 420  
gaa 423

<210> 4966  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-006-Q1-E1-C5  
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atttcatgga gccgtacgtg agcaagaacc ccaggcaggc gtacgccaac tacanggaca 360  
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<210> 4967  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-C7  
<400> 4967

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ttcttctctg gttctgctgg ttcccttgac ttgtaagaag gtaaacataa ttttaattaat 180

ttggaatttt taaccgaaa ttggataacg gttcaaggct tggaatgtat aaggaaggta 240  
 ccttaattga ccaacaaagt gtgttttgaa cgtctctctc gcttacaaaa aaaaaaaaaa 300  
 aaaagaaaaa aaaagagaaa aaaaaaaaaa agaaaaaaaa tataaaagaa aaaaacacca 360  
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 cccaaaaagt tttaaatttt tt 442

<210> 4968  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-C8

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<210> 4969  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-C9

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 tttttcttga gtcaatttat atactgtata agaaagggtg acaagtcagg catctaatat 240  
 tgtttcgtcg ccgacgtgaa ctgctagtga attgcatttt tcaagctcct gtgattcggg 300

agcattttcta ttagttacat ctgcaaagcc aagcaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
 aaaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420  
 gcggggcgcc 429

<210> 4970  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-D10  
 <400> 4970

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 gacatatata atcctaagac tcaaaatagt tttcttctag actcaacaat ggccaacaat 120  
 caaggggggct cctaaggtcg gtcgaggctc tgataccaaa ttttcacgcc caagatgtga 180  
 ccctatccta aaggaactcg aagggtccac caaggataga agcgcatctt gaagacgctt 240  
 ttgcaagatg gatatcatta catcaacact acataataga tggggatata taaaaaggc 300  
 atacaatgcc acatgaatac aacatcacia tacataagag caacatccga ctatggatga 360  
 aacacaaaca gaaactcaaa tgacatccac cctgctagcc caggctgccg acctggaacc 420  
 tatcccctga ttaaagaag 439

<210> 4971  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-D11  
 <400> 4971

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 tgaaaggcga ggatgtgaac tccctgcagc ccaaggaact gatcgccatt gaggaagctc 120  
 tcacgaacgg ccagaccaac ctcagggaca agatgatgga cactggaag atgcacagga 180  
 ggaatgagaa gatgctggag gaggagcaca agctgctggc tctgaggatg caccagcagg 240  
 acgacctgag cagcggcatg agggagatgg agctcgggta ccatcagggt agggatttca 300  
 cttcccagat gccgttcacc ttccggtgc agcccagcca cccaacttg caggaagaca 360

agtaggccac cgaatcctgc cacggcctgt gtcaactgaa gtcctcttac ctgc 414

<210> 4972  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-D3  
 <400> 4972

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 cgacggcact gtgttcacga agaaaggaca tgaaggcgac gaaccattcg agttcaggac 120  
 ggatgaggag cagggtcatcg aagggtctga cagcagcgtg ctcaccatga agaaaggaga 180  
 ggtcgcgtca gctagaatac cacctgaaca tgcgttcgga tccaccgaga cgaagcttga 240  
 tcttgctgtg gtctctccca actccaccgt cttctatgaa gtggagattg tttccttcga 300  
 caaggagaaa gaatcttggg acttgaagag taatgctgag aagatcgaag cagctgctaa 360  
 aaagaaagat gaaggaaatg cgtggtttta gatgggcaag tacgccaagg cttccaagag 420  
 atatga 426

<210> 4973  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-D4  
 <400> 4973

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 tttttattcg ccacatgtta tgtgttttgc ttggagcatc gtgtattata ttagtctttg 120  
 ctttttagtt taccacaatc atccttggtg tacacacctt ttgggagaag actacttgat 180  
 tataatttgc tagaatactc tatgtgcttc actcatatct tttgagcgtg atagtttttg 240  
 ttctagtgtc tcaattatat ctttttagagc acggcgggtg cttaattttg aagaaattgc 300  
 tagtctctca tgcttcactt atatcttttt gagagtcttt tagaacagca tggatatttc 360  
 tatgggttaca aatttgggtcc tagaatgatg agcatccaag ttgggtataa taaaaactat 420  
 cat 423



<210> 4974  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-D5  
  
 <400> 4974

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 caaatctcgg ggaaaatgga gtcgaaagt cgagtttcga gaggagaaag attaactagt 120  
 gtggctcgga catttcacg aacacctcat gtgcatagga ggtgagatag agcacccaaa 180  
 tgcctctcc tcgccggcca aaaaaaacag agcactgtgg agtgctctgc cgcggtgatg 240  
 ggtatatata ggcaatttat ttgtcccggt tcatgccacg aaccgggact aaagctcccc 300  
 cttctacacc ggttcaaggc atgaaccggt accaatggct gtgggccagg agcgaggacc 360  
 attggccccg gttcgtgcct agaaccggga caaatgggtc cagacaaaacc gggaccaatg 420  
 ctcacgaggc cccggccggg cccctgggct cat 453

<210> 4975  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-D8  
  
 <400> 4975

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 aaacttcgcc ggtgcatcca aaccccatga tatgatacgc tctatcacac ataaacctcc 120  
 ttatatcttc cttaaaacag ccaccatacc taccaattat ggcatttcca tagccattcc 180  
 gagatatatt gccatggaac tttccaccgt tccgttcac atgacatgtt tcatcattgt 240  
 catattgggt ttgcatgac atgtagttga catcgatatt gtggcaaagc caccttcata 300  
 atttttcata catgtcgctc ttgattcatt gcatactcgc gtacaccgcc ataggcattc 360  
 atatagagtc atattttgtt ctagtatcga gttgtaattc atgaattgta aataaaaataa 420  
 agtgtgatga aca 433

<210> 4976  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-E10

<400> 4976

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 aaaatgaacg tatcaactcc cccaagctta gacctcgctt gtccgcaaac aaaaaccgaa 120  
 atcgaaaaac atgtccacat gcttagagag agagaggtgt cgataaaaac aaaatacggg 180  
 catagaagca tgatgtttat tattatagca gcaacaaact taaacaaaat acatatcttt 240  
 gtcataaata acagtaagtg attacatacg gagcaaaata agtgaatcta cactctaaaa 300  
 tgtctaaaaa caagtgagtc tacatatatc cgtatgttac agttcatttg aaatgtctaa 360  
 aatgacttat atttaaaaac gaaggaggta gatgggttgg ctatgacaat actaatgtga 420  
 ccggaagtcc tgag 434

<210> 4977  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-006-Q1-E1-E12

<400> 4977

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 tttgcatatg tttgcttggt taatgattct atttgaggat angagtgtta aatatgcaga 180  
 tacatttagt attcaatggt gaacaataat ttatgtgatt ttttacaata taaaatgata 240  
 agtttttgca ttggtttata ctaacctatc tcacgagttt ttgttgagtt tgggtgtggat 300  
 gaagcttttg ataaaaagag aaaccatgat atgagaggaa ttaatgagac acaaaagtgc 360  
 aagcttgggg atgccaagg cacccaaaga 390

<210> 4978  
 <211> 212  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-E6

<400>       4978

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gcgacctgaa taaaataaac gatctaagtc tctagtccaa aaaaagtcaa aagcatgtaa   120  
aaaaaaaaatc ggccgctcga taggatctac gcttacatag tcgtgcatgc gacatcatac   180  
ctcttctgta atgtcagcta aattcaattc ag                                       212

<210>       4979

<211>       404

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-F10

<400>       4979

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ggataggact attaaatatg cagaggcatt tagtatgaaa tgttgaataa taatttttagt   120  
gattttctac agtagagtat gataaggttt ttgcaatggt ttatactaac tcatctcacg   180  
agtccttggt gagttttgtg tggatgaagc ttttgagatt tagggagacc gtgatatgag   240  
aggaattaag gagacacaaa atctcaatct tggggatgcc caaggcatcc caagataata   300  
tttcaagaag tctctagctt ctaagcttgg ggatgccccg gctggcatcc cacctttctt   360  
cttcaataaa ctatcggtta atattggttg atcctaagtt tttg                       404

<210>       4980

<211>       399

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-F11

<400>       4980

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aagaagatga ccaacgagaa gtacctggcg gggcggttcc gctacttcga caaggacggc   120  
agcggcttca tcgagatcga cgagctccgg caggagctgg ggccaacga gcaggccatc   180

ctcgagatca tccgcgacgt cgacaccgac cgggacggac gcatcagcta ccaggagttc 240  
gagctgatga tgaagtccgg ggcggactgg aggacccgcc agttctcgcg ggccaacttc 300  
agcacctca gccggaaact atgcaaagaa gaaacttcct cctcgtgaat tcaatttggt 360  
ctactgctag atgtgattct ttttgtgcat gtaagctgc 399

<210> 4981  
<211> 410  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-F12  
<400> 4981

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tgatgaaaag aaacccgata tcacgaaacg accacacact cctattggag atgatgtgga 120  
atgcaagaag ccaaagatag cagaaggctc aagggtgcaa ggagaagaac ctgaggctgg 180  
agggataaag aattcctcct gggctctgatg acaggggaat gcagtaaaca ccagaagcat 240  
caaaactatg atctggtaca gtatcctgaa tacactatct tctggattat gaatgaattc 300  
tgaagcatgg ggctataagt gaattatgta acatggattt gtaactatgg tggatgtaa 360  
gttaatgttc tatcacgtac atgccgccgc agcactacta cgttccgaac 410

<210> 4982  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-F4  
<400> 4982

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cgctggagtg ggccgtccgg aacctgctcc gccggggcga caccgtcgtc gtcctccacg 120  
tccagcgcca cggcggggag gaggccaagc acgccgtttg ggccaagtcc ggatccccac 180  
tcatccctct gtccgagtac cgggagccgg aggtgatgaa gaactacggc gtgacctgcg 240  
acgccgaggt gctcgacatg ctcgacaccg ccgcgcgcga gctcgagctg aagggtggtg 300  
cgaaggtgta ctggggcgac gccagggaga agctctgcga cgcggtggag gagcagaaga 360

tcgacacccat cgtcatgggc agccgcggcc tcggtacccat ccagaggatt cttctgggaa 420  
gtgtgaccaa ctacg 435

<210> 4983  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-006-Q1-E1-F6  
  
<400> 4983

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aagccaacca ctggatgtgg ttttcaggga tttttgcagt gggatttgta ggggtactatg 120  
ctgcgctgtg tttgggattt gaaataaaac gatgggagat gtgccacgct cttaaagtcc 180  
agtcttctgc tctaattctg ctaaattact tgttgcattt tgcagcttgt ctacctttac 240  
agtgactacc ttcttttggc tgtgctcatt tggcaaaaca gtttgtctaa ttcacatcta 300  
cttcgtgtct ttttagacat ttcaaataga caacaacata cggatgtatg tagacatatt 360  
ttatagtgtg gatccattca ttttgcctcg tatgttgtca cttgttggaa tctctagaaa 420  
gac 423

<210> 4984  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-006-Q1-E1-F7  
  
<400> 4984

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caggctctgc gcgtccattg tgcggagctg cctcaaggag ccctacaagt ccgaggccgc 120  
cgaagtcgag aaggctccact actcccgctc caagtggacc gacggaaagc agcccaagcc 180  
caccatctgc gaagatgata aatgaaagat ccggtgccat ggtgacagag tccttccctac 240  
ggacgttttc aaaagctact gtgtttcgtg ctggccattc tacctaaaac tcgttatctg 300  
ttagatttat gtttcacgct caagaataaa ttattttacgt gacattggat ctgttccgac 360  
accattttat ttttaactttt aatcgctac 389

<210> 4985  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-F8  
  
 <400> 4985

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 ctcccttgct ctgcgttttc gttgtggtga agatggcgat atcgatggag cgcaggaaga 120  
 tgaagcccggt ccttgctctc gtgctgctgc tgtcgtgcca tcttcttctt ccgctggctc 180  
 cctccgtgcc tgtgtcgagt aagtgtttga cctccaaccc catgcacgca tgcattgacc 240  
 ttacttaata tcagttcatc ttctttcttg gcatgtgtat gtgcatgcat gcatcttaat 300  
 tttgagcctt gctctcgat gtaggaagcg tggccttggg aaatcatcta gcctcagctt 360  
 ctagtctaac tctggaggcg gcgcctgttc aggtcaatct ctcactctac ctgatgcc 418

<210> 4986  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-F9  
  
 <400> 4986

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 gtaaagggga tcaggggggc gaggctggcc aggatgagca ggtgaagaaa aagcgcggga 120  
 ggccaaggaa gtataagcct gatgggtcag tgacgttggg gctctcgcca tctccatcca 180  
 cgcctcattc gtcgagccca ggaatgggag cgatgggtac cacacctggc tcaggatttg 240  
 ggccggggac agggtcaggg ggttctggtt caggcgcact gacggagaaa cgtggcagag 300  
 ggcgccacc tgggtccggg aagatgcagc agctggcttc gcttgaaaaa tggtttcttg 360  
 gctctgttg aacagggttt actcctcacg tgatta 396

<210> 4987  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-G11

<400> 4987

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taactgcgga ggtgaatgca ctaaagcaga gcctcgaacg gtccgagaat gagctcggcc 120  
ttgccaagaa gtagctcgag gataaggaag gtaagtaata cttatgaaa gtagtacctt 180  
atagaaaagg atttggttgc aaaaaatgac aagaataacg tgggtattgc agggggccacg 240  
aatgaggtgg cgaccctgaa ggaggcgggtg tccaaggctg aaagcagtgc ggccttgagg 300  
cgaccgagc gagagaagca agaggcgcgg gtggcggagg tgcggcaaga gctccaggct 360  
ctcgtggaaa aacatgagag tttggagggt gactcgaggg cccgagagtc cg 412

<210> 4988

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-G3

<400> 4988

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tccgtaatgc atcatccgc aactaactca ttagtcacat tgcattgcaag gcttatagtg 180  
atgtacatta ccgagagggc ccagagatac ctattcgaca atcggagtga caaatcctaa 240  
tctcgatcta tgccaactca acaaacacca tcggagacac ctgtagagca cctttataat 300  
caccagtta cgttgtgacg tttggtagca cacaagtgt tcctccggtg ttcgggagtt 360  
gcataatctc atagttatag gaacatgtat aagtcatgaa gaaagcaata gcaacatact 420  
aaacgatcaa gtgctaagct aacag 445

<210> 4989

<211> 421

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-006-Q1-E1-G6

<400> 4989

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 acgcttactg cgaccgtcag tctgtggatc tcaactccat tgctttcctt tttgatggtc 180  
 gtaggctccg tggtagagcag acccctgatg agcttgagat ggaggaaggc gacgagatcg 240  
 acgccatgct tcaccagacc ggaggggtgct ttctggccc ttagaaggag cttgctgcag 300  
 cctggctgtt ctatgtcgta tgctaccttt agaactagag taaaatgtaa gaagtgaag 360  
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 t 421

<210> 4990  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-G8  
 <400> 4990

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 caagacaatg gaatagtaag aaatacaaaa tagggctact ggtgaaatac atgagctgag 180  
 aagccgcaaa atagcgcttt gctggttaac cgggttaaaa tatgttccca ttgcctgtgg 240  
 gatggggctg aatgcggaga ctggttgtag ttcataggga gtagtgtaag tttcactggt 300  
 agcacctagc tagctgagat ttcacaatta ctaatattga tttttgaaca tgttgactgg 360  
 attatattga tttcgtatct tgctaagagc ctaagatgct aaggggcaac cttttgatgg 420  
 tc 422

<210> 4991  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-G9  
 <400> 4991

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tcgtcatcgt ctactccgtc ggctgctgcg ccttcaggaa caaccgccgc gaccaccgca 180  
acggcgggcg gtacaagcag cagggcgcggt acgcttgatc gcgcgcttgg ctcggttatt 240  
tattgcttgg attggatgga tgcgatcgtc tcgtcgtgtc atgcattctc gtcgtcgtgt 300  
ttctcttagg atggcctgat ctagctttgt acaggcgaga tgtgctctga tcacctacta 360  
gttaggtttt actccgtggt catgaggagg gatgtgtata tatatttt 408

<210> 4992  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-H11  
<400> 4992

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ataaaagtgc gtaccgtgct tttatgttta cgagctaaag ttctagcgca tgaaagtcga 180  
agtatatact ttagtcgata caaagtcctg tttttcgaag atccactatg ataataaaaa 240  
agatttctac atatccgacc aaatcgatca agaatatccc aatctgataa atctgtccaa 300  
atgggtttac taataggatg ccccgatcca gtacaaaatt gagcttttga taagtatcct 360  
atgaggagag tagcggggac tatggtatcg aatttttttc attcgagtat ctattagaaa 420  
tg 422

<210> 4993  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-H7  
<400> 4993

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ataactcctg gcaaagtcgc ttcccaggca gtgtaccata ttccacggcc atttttgaaa 180

tccaagaaca acctattggt tgtatttgag gaggagcttg gcaagccgga aggcatactc 240  
atccagacag tgaggagaga tgacatctgc gtgtttatct cggagcaciaa ccctgcgcag 300  
ataaagccat gggacgagca tggaggccag atcaagctca tagccgaaga ccacaacact 360  
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ggcaaccggt tggggtcattg cgccaacttc ac 452

<210> 4994  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-H8  
<400> 4994

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acgacatatt acatctcaag gggaacaata caaggaggcc acatcagttc atcgagtcta 180  
tcgacgaatg ataaaggata cagtttcaag cgaatatgag ggtgtaacaa actgatgtat 240  
cttggggggca ttctttgcct gagactgttt ctgttggagc aaagtgtttg taccataatg 300  
atctagatta tctatgtgga cctatatatt attgtcagca caacatggaa tgaatttgaa 360  
tgtcaagtac aaaccacggt attcgggcat gaccgatcta aaaaaaaaaa taa 413

<210> 4995  
<211> 371  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-H9  
<400> 4995

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cctgggagacc ggccgcaacg tggagatgcc tggccagggc accaacgcgg agcagctcgc 120  
caggttcgca aagcagctct ccgacgagcg ccgccgccgc aaaaaggcgc ttcagggttaa 180  
ctagcagctg gccgccggt cgctcgactg tgttgaatct tgctcgtttg gtggatgttt 240  
tccattcagt tctttttctt ggtacagcga tgtacagtaa tattgtacag ttatgtgaga 300

gtattgtgcc acggttgga aataactaa ggggtgtacct gttttgctgg agcgagtgtt 360  
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<210> 4996  
 <211> 405  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-A1  
 <400> 4996

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 atgacgagga taggcagcgg cgatacaaga agcgcgacga cgacgacgat gatgagagga 120  
 agccacggca caagaagcac gacgatgatg acgacgacga tggcgagagg aagccgcgggt 180  
 acaagaaacg tgacgacgac gatgatgatg aggatgacag gaagccgcgt tacaagaagc 240  
 gtgacgacga cgacgacgat gatagaaagc cacgttataa gaagcacgac gacgatgacg 300  
 acgacgacga tgagaggaag cagcgtcgcg ggaacaaccg ccgccgccat gattacgatg 360  
 actgatcaag gcatcctgac atgagtttag ctgacgctaa ataag 405

<210> 4997  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-A7  
 <400> 4997

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 atagatccat cagctctaag taaactgcgt ataatcatg tatgtataag gtatgtgtta 120  
 ctgatgttag aagttgattc cttgtgtgag ggtgcggatg taacacaaca tgtaattctt 180  
 aatatccaca tgcctcacca aaacaatgta cggctaacc acaattatga cgttatcaag 240  
 ctcatataa atatgcatgt aataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aattaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagcggcc 360  
 gcccaaaagg ttcaaaccctt acttaccctt gaatgcaact tcaaaccctt tcaaaagtgt 420  
 caccaaaatt caattcaagg gccg 444

<210> 4998  
 <211> 233  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-B6

<400> 4998

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 tcgttacgcc cgctcataat tcctttttcg acgctctgga gaataataac tactggtata 180  
 tcattctata tcaaagccgg cttgtgaaat aaatgatccg ccgtcttgcc ttc 233

<210> 4999  
 <211> 464  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-B8

<400> 4999

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 agagaacttg gattacagta ggtttaaaac caaaataaat aaataatgag ttcattgcag 180  
 taccttatgt ggtgggttttg ttttctttca ctaacggagc ttataagatt tcctgttgag 240  
 ttttgtgttg tgaagttttc aagttttggg taaagctttt atggactatg gaataaaggg 300  
 tggcaagagc ctaagcttgg ggatgcccaa ggtaccccaa gatattcaag aatagccaaa 360  
 atcctaagct tgggggatgc cccgggaagg catccctctt ttogtctctg ttcattggta 420  
 actttatttg gagctatatatt tttattcgcc acatgatatg tggt 464

<210> 5000  
 <211> 469  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 5000

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gccaccaacc gggaccaaag ggtctcctga ctgggctctg cacactgccc acgtggatgg 120  
gctttagtcc cggttctgga ttgaaccggg actaaagggt ggaggtatta gtaccgacac 180  
tttagtcccg gttcaggaac cgggactaaa ggcccttacg aatcgggact ataggccctt 240  
tttctaccag tgcagccaca catgacggcc accgtcgaga gataaagcat gatttgctaa 300  
gttgtgagct tcaaaattca agctcctaaa ttcattggcta gatttacaga aatcaaaagt 360  
ggcatattat ttcattgatg gtagctccat aaacagatga gttttccttc ttcaagtcta 420  
ccancaccac tttgcaatcc gaaggcaact tggaaatcac acacataaa 469

<210> 5001

<211> 416

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-007-Q1-E1-C5

<400> 5001

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aggacaagaa gcacggcgag ggccacaagg acgacgacgg ccacggcagc agcagcagcg 120  
acagcgacag cgactgagcc agctccggcc gcgctccggc agcagcgtgc agtgtaggag 180  
agatcgatga acgcttgagg gaagtgtggc atacatatat gttgcagggt ttggagcgtg 240  
tggtagcata tgtatgtaat gcgtgacatg tctcatggat cttgtgatgt ataataatta 300  
gccggctgca ctgactgca cggtgcttgt aataataacg ttaatgaatc atgttggtat 360  
tgatgcaaaa naaaaaaaaa aaatcaaaaa atagcaacat taaaaaaaaatg ttaacg 416

<210> 5002

<211> 346

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-C6

<400> 5002

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acgcggcgcg gcccatcgcc gtggcgcccc ggtccatcgt gttcgtccac atg'ccggatt 120  
accatgcccc tgcgtgtgct tagttagggc tttttgggtg tcttgttggt ataggtagtg 180  
gtgataaaag ggtggccttgc taagcatgtc catcctagct agggtagtta taagatggct 240  
gaagagagtg tgtggcctttg tgtgattaga tgtaataagt ttggagggaa aattgaatta 300  
gtgaaacaag aggcaatggg aataaactct ttcttggttt cttctg 346

<210> 5003  
<211> 456  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-007-Q1-E1-C7

<400> 5003  
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ttgtgtggta ctagagaggc tagtagttgt ggaaggggtga gagtgcgat aatccgtgga 180  
ctcaacatta gtcataaaga actcacatac ttgttgcaaa aaattattag ctatcgaaac 240  
aaagtactac acgcatgctc ctagggggggt agattggtag gaaaagacca tcgctcgtcc 300  
ccgaccgcca ttcataagga agacaatcaa agaataaatc atgctccgaa tcattgggac 360  
accttctaga taaagttgac tcatctccag tcncatcttt atcaagattt atattagaaa 420  
caaagattca ataggagtca caccaatcac ttttaag 456

<210> 5004  
<211> 419  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-D1

<400> 5004  
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atcactatat gacaccacac aacagatatg ctgctgtcag cagtgtcttc taaatagaca 120  
ctgcaattat cttatacatc attactgttg tcagcaatgc tctctaaata gacactgcaa 180

ttatcatgta catcattgct gctgcaataa accactaaga attattcaat atctagccta 240  
 ggccttcgt tatcatcaac cgagggttga ggaggagttta caaaatctga atgagaaacc 300  
 aagggtattgt ccaagtcagc gacatctttg ttatcttcag agctgttaga agcagctgag 360  
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<210> 5005  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-D5  
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 gaggagcagg ttccagatta ctcgagagcc tattctgggtg ggttgagacc ccatgccccat 120  
 gtcatgttgg atgatgagac cgaggatgat gatgaagacg ctgaagggga cggagagggc 180  
 gacgaggaag aatacgacgt gaacctatgct tcggctgatg ttgatgatga gatggacgag 240  
 gatgatgatg atataggtaa tgatggggat gatgggtgggtg atggagttga ggtgaatgca 300  
 gatgaagatg aaggcgcgac ctcatactcg tcagagtaca gtgaataaga gcttgtctca 360  
 tgtgaccatt tacgcacgta gtgatactgg tggacaataa taagcctttt ggcctttttt 420  
 tgggggcaaa gtgggctaga cgtggaacgg gga 453

<210> 5006  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-D8  
 <400> 5006

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 tggcaccaga gggttcccag tttgatgcta agcagtatga cagcaagatg accgagttac 180  
 tgaaccaagg tgacaccggg gagtttttca cctcgtatga tgagggtgcac gaaagttttg 240  
 atgacatggg cctccaatag aaccttctta gaggcaccta cgcttatggg tttgagaagc 300

catcagccat tcagcaaaga ggaattgttc cttctgcaa ggtcttgat gtgattcagc 360  
aagctcagtc tggaacagga aaaactgcc a cttctgttc tg 402

<210> 5007  
<211> 102  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-E12  
<400> 5007

agtcgtatta gtcctaaaaa agggcgcc ctaaaggatc aagccttact tacccttgca 60  
ggcaagttca taccctcct aaattgtcac caaaattcaa tt 102

<210> 5008  
<211> 454  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-E5  
<400> 5008

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gggcgtctg aagcggtcgt cgtcgtaaa tgccgacagg ggcagagaat ccacgatgaa 120  
cgctgctagc accacgggtg gtggttgcaa gctggagctt gcggcgagg aggtggacgg 180  
cgtcgcgcc cgctgcatcc cggccgggag gaaaccagc ggcagcagca gcaagaagtc 240  
tccgaccacc cagtcacg ttagcagccg gcgcggcgac caaccgaaa ctaccgacga 300  
cggacggact gactgatttc acccaagaaa actcatgaaa acatactagt actagcatca 360  
aatgttgat cgacgtgct cgcgtgcaga ctgaacgaat gtcttgctac ggcacgcgct 420  
cttgcatcga ctaactttcc tttttaaaat ttcc 454

<210> 5009  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-E7  
<400> 5009



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 ctccgtgacc agcacggtat cccctcgtg aagagcggtta cgggaagcaa gatcctccgc 120  
 atcctcaagg ctcattggcct ggctccggaa atcccagagg atctgtactt tttgattaag 180  
 aaggctgtcg ccattaggaa gcatcttgag aggaacagga aggacaaaga ctccaaattc 240  
 aggctcattc ttgttgagag caggatccag cgtcttgccc gttactacaa gcgcaccaag 300  
 aagctcccg ccaactggaa gtacgagtct accactgcc a gcaactctggt ggcttatgat 360  
 ggctcttcat ctggtgtgct cttaccggct tcatgatggt cttggt 406

<210> 5010  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-007-Q1-E1-E8  
  
 <400> 5010

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 gatcaaacac atagctactg gtacataccc tcagcctcga ggggtgaacta ctccctcctc 180  
 gtcattggaga gcgcggggat gatgaagatg gccaccgggtg atgggttcccc cctccggcag 240  
 ggtgtcggga agggctcccg agagggtttt ggtggctaca gaggcttgcg gcggcggaac 300  
 ttccgatcta ggtaattcc cgaaagtctt agtatttata ggaattattg gcgttggttt 360  
 cacgtcaggg ggggtctcccg gccgtccacg agatangggg gcgcgcctt ctaactcgtg 420  
 ggcatcccg acctcttctg gcccaactcc gatgct 456

<210> 5011  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-007-Q1-E1-F7  
  
 <400> 5011

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gccttgggac atcctccac ctcttggcc gccaccctt gtcctatat aagtagatcc 120  
atctagtagc ttttctggg gatttgttta gttaaaagtt agccaacgca acttcgtgta 180  
cttcgtttgt gtccaacgac cagaccaaga ccgctttcgg atccccacct ttatcaatac 240  
ttcatacata ttgcaatat tcagattgct tttatcatat tcttgctcgt tcttcgattg 300  
cttgcaggaa tagaccttcg tggtcagggt gatcgtgcna cggcgtggtc aataacctct 360  
ggagattggt ttagcgattg ctaaggcgca acgtcgtgca cgtttgt 407

<210> 5012  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-G5  
<400> 5012

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cagtcaatac tcggcctcgc cgtactccga gcagaagtca ttatcacgca gcatcccggc 180  
ggactatacg gctgagctgt ctgatgccat caagctgcac atcgggttgt aatcacagat 240  
agcatatgca tctatatgat gctataagca attgacgata tagagtaa at agtatatgca 300  
tgttgctgaa atgtggcgcg gatattagat atgactagcg tgcattgcgg agtttgtaaa 360  
aaatgcatct tgatgttccg tgcagggcac tcgaaacgat 400

<210> 5013  
<211> 399  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-G7  
<400> 5013

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ggcgaatggt cgcattccat ttggtgctct tgatctgggt cggcctggcc atatttttgt 180  
cacaacaaag cgcgattacc tggagaactt gcgttttgct tagctgctat tgagcatgac 240

tcgtttctga tgggactctt tttagtgttt ttgctacatg atcgtgtcgc ctatctggta 300  
ctatgaacta aacatgggaa aagaatggat cagtgttagt tgatccttgg tcaaaaaaaaa 360  
aaaaaagaaa aaaaaaaaaag aaaaggggaa ggaggagag 399

<210> 5014  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-H5  
<400> 5014

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gcccttttag tcccgggttg tccaacgaac cgggaccaa gagcggcatt ggtaccggtt 120  
ggttccgtgt aactactttt ttatcttctg cagctatttt tttgttgatt cttcctgcag 180  
ctgttttttt agtcccacct cgccaagcga gaggcagtcg cagttgttta taagccctga 240  
gtgcagagat gatgacgaag aggctcaatg ctctgcata ttggttagct tcaagccttg 300  
aggaatacgg tagactgcac agagctatgt gcagtgcagt tgacactatt ccgaaaggct 360  
tgaagcaaata ttaacgagca ttgcgcccct tttttatttt taatgac 407

<210> 5015  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-H6  
<400> 5015

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ttatcacaat catccttgct gtacacacct tttgggagaa gcctacttga ttagaatttg 180  
ctagaatatg ctttgtgctt cacttatatc ttttgagctt gatagttttt gctctagtac 240  
ttcatttata tcttttagag cacggagctg acttatcttt gtagaaattg ctagtctctc 300  
atgcttcact tatattagtt tgagagtctt ttagaacaac atggtatttg ctatgggttac 360  
aaaattggtc ctagaatggt aggcaccaa gttgggtaca attaaaacta tca 413

<210> 5016  
 <211> 269  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H9

<400> 5016

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaca 180  
 aaaagataaa aacattacct acacatgcat acgacgtcat acctcttcaa taatgtcaag 240  
 taaattcaat tcaatggccg taattaaat 269

<210> 5017  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-A1

<400> 5017

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 attcatgtta agtttagttg aaactgtatc atcatgggtt cagtttaaaa gtagaaactg 180  
 tctatcaact gacatgcttt tgttgactgc tatggagtaa ttttgatacg aacaaggctg 240  
 ctaattgatt tggtccttgg tatagcttgt ttattccgag atgatgttaa tttctaagtt 300  
 taatctgttg aattagcatg gttatgctac ctttcaagtt gtaattcaac ggatat 356

<210> 5018  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A10

<400> 5018

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ctcctccatg gtcgtcatct ggggcagcgt cagcgccgcc ggctcgccg ggatcttctt 180  
cttcggcggc aaggagaaat tccagggcta tttttctcgc gaaggcgaga ggctaatagca 240  
gcaggacaga gccatgatgg gcaagaacta gtgcacagca cggctcactt tcgacgtgtc 300  
aacatgtgaa tcagacatga aacgacgtat ctctgtggtt tagaacataa ctttctcttc 360  
ctgccaatgg caccttttgc ttctgggccc c 391

<210> 5019  
<211> 379  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-A12  
<400> 5019

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gaacaaggtg aaggcgctcg tcggcgctt cgagaccgtc atggacgaca accaaagccc 180  
caccgcgcc cgcaagccgc ggctcaacct cggcgctga actacgagta cattcgatga 240  
gcatgaagct cgatcgctg cgctcctcc tttatccccg ctactcttta atcaccatc 300  
aaccgaattt gtcgtcgctg cacacttatc tataattacg gtatcgctta tattctgcaa 360  
ggaggaagat gatggaagg 379

<210> 5020  
<211> 336  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-A4  
<400> 5020

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gtggatcttc tacgcgctgg tcaagaccaa ctccagcccg ctgctgacca tcaacgcctt 120  
cggctgcgtc gtcgagtcct tctacatcct gctccacgtg gtgtacgcgc ccaggaacgc 180  
caggcaccgc gccctcgctt tcttctcctt cctcgacgtc gccgccttct ccctcatcgt 240

cgctgctcacc gtcttctctcg tgccccagcc cagccgcgtc aaggtcctcg gcagcgtcgg 300  
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<210> 5021  
<211> 295  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-A6

<400> 5021

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accgcagaac tcgtgtcgcc ccttaccgc agccttcgag aaggtgatgg acgcgccggt 180  
gctcgtgacg tgcacgcacc gctgcgcttg tangagagag atcagagcat gaagagagca 240  
accagcgtga aaaataaaca ttagcacatc agaattgttg ctcgatcccc ttgtt 295

<210> 5022  
<211> 361  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-B11

<400> 5022

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tctgtcttct gtttgcaatg ctttgctcgt cgtgaagacg aacagtacaa ataacgtggt 180  
aaaacgtgaa gatgaaatcg aatagagggc accggcgga attgatccac cgccggtggt 240  
tgaagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaattaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgctcaaaag gatccaagct 360  
t 361

<210> 5023  
<211> 391  
<212> DNA



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tatgataatc caagaaccaa atactcaaaa tgtccataac cggggacacg actaaccatg 300  
attagattgt acactctgca aaggtttgcg cacttttccc cacaagactc gatgtcctcc 360  
gttggatttc tcgcactaca tgatgtttg 389

<210> 5026  
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<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-C5

<400> 5026

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agaagtagat cgcaaagcaa atatatgaga aagaagaccc gggggccgta tgtttcacta 180  
gtggcttctc tcgagaaaaa tagcaaacag tgggtagaca aattactgtt gggaaataga 240  
tagaacttca aataatcatg acgatatcca ggcaatgac attacatagg catcacgtcc 300  
aagattagta gaccgattcc tgcctgcata ta 332

<210> 5027  
<211> 272  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-C6

<400> 5027

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gtctcaggtg gagctgccat tgccttctta cgcttgccgg tggagctcga tggtgcgctc 180  
tcgacggtag cgcagcactc caaagaggtg ctcttgccgg agtgggcatc agagctcttg 240  
ccggacttgg tcttcttctt cccccgggga gt 272



<210> 5028  
 <211> 354  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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<400> 5028  
  
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 gggctcggca cagtgtttgg atgcccacgg gaagctccag cctgaccagg actacctgca 180  
 gcacatcaac caccggtggg ctccacgacg cgccaggcag accatangga agctcatggc 240  
 ctccacaggac gggtccggca atgtcgtcga gctgacgtg gagtccctgca atgctgattg 300  
 cgtctccttc ttctcaagg accctaagaa ggtccaaact atcaataaaa tccg 354

<210> 5029  
 <211> 351  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-C8

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 tggatgggga tgagcccgtg atagaactgg aggaaagtaa ggaacctgag acagaagtct 120  
 cagcaaattg ttgatttagc tgtaaaggcc aagggcgcca tctctgattg tagaaggtag 180  
 caatactgtt catgtaaata caaggatggg gctattgtac ttgtactcgc cgtcctttgc 240  
 ctgatgaagc agaagagctg tccaacaccg ccgttccttg gggagtcaga caaaacaaaa 300  
 cctgtgaaaa caaaaacttg ggggtaacaa cctgacaatt tgggtttggg g 351

<210> 5030  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-D11  
  
 <400> 5030

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 atcgtcgtcc tcgtaggact cgctcttgct tttagatttc ttctcggcat catcatcctc 180  
 ggacgagtcg cttttttctt tggatttctt ctcatcatcg tcatcatcct tgttttccaa 240  
 tttcttttcg ttcttctcat catcatcgtc atcatccttg tttttcaatt tcttctcttt 300  
 cttctcatca tcatcatcat tgctcgtcgtc gtgcctcttg catttagact tgttagcttt 360  
 cttctcatca tcatcatcat catcatcatc cttgtttttg gatttc 406

<210> 5031  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-008-Q1-E1-D12  
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 ccagtacgag tgcgggatgt actcggacgc cgccgatttc ctgtcccagt accgcgctct 180  
 gtgcaccaac agcgagagga gcctcagcgc cctgtggggg aagctggcgg cggagatact 240  
 gatgcagaac tgggatgtcg cgcaggagga gctcaacagg ctcaaggaga tgattgattc 300  
 cagcagcttc acctcgtcgc ctgtcaacca gctccacagc aggatatggc tgatgcactg 360  
 gagcctcttc atcttcttca accatgagaa tggaaggaac gggatcatcg aact 414

<210> 5032  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-008-Q1-E1-D5  
 <400> 5032

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 cccggtgggc atattttcat cagggaatcg tgcttccacc agtctgggga ttccaagagg 120  
 aaagtgaacc cgacgcacta ccgggagccg aggttctaca ccaaggtgtt taaggaatgc 180

cactcctatg accaacaggg gaattccttt gagctttctc tggtaacttc caagtgcatt 240  
 ggagcttatg tgaaaagcaa gacgaaccag aaccagatat gttggctgtg ggagaaggtc 300  
 aagtgcacag aagacaa 317

<210> 5033  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-008-Q1-E1-E11  
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 tggtttttcg tggctacaga ggcttgccgc attttgggat ttatcagaat ttttggcgtc 180  
 ggattcacat caggggggttc tcgagggacc cacaagccag ggtggcgcac ccaggggtag 240  
 ggcgcgccctc cactctagt ggttcctcc ggactcttct ggcccaactt cgatgctcct 300  
 gggcttggtg tgggccataa aaaatcaccg taaattttca gctcgtttgg actccgtttg 360  
 atattccttt tctgt 375

<210> 5034  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-008-Q1-E1-E12  
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 cacttgctaa atttgagctg atggatggtg cccagtcag aggagaatct attccagtaa 120  
 ggctattctt gactccatac gagctaaccg cgacttaccg caacataaac aacaagttct 180  
 gtgtcaagta ctacctcaac ctggtccttg tggacgagga agaccggaga tacttcaagc 240  
 agcaagagat aaacatgttc cgtcttgacg aaactocaca gccttcatac acatctatcg 300  
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 gtatataact ctccaggaga gcatgc 386

<210> 5035  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-E6  
  
 <400> 5035

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 cgtccagatt ggttcgacc agttcaaggt gagcaacggc gactccatct tcacggagag 180  
 gctcaagttc tgcgatgtga atgacaagtt agtttttagat cgagttctca tgcttggtc 240  
 acaagctcaa acaataattg ggagggcaat tcttactgat gctaacggtc atgctgtcgt 300  
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 acgccgaaca agggg 375

<210> 5036  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-E9  
  
 <400> 5036

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 cgtttatggc tacagaggaa agagcattaa gtctgccctc atcggtgggt ctagcctggc 120  
 attcacatct gccatcctgg acgttggtgg taatactacc agagtggaca atggaaaagc 180  
 gtaccatgca tacacaacgg aaaagaagcc cgagcctgcg cattgatcaa ggttgctctac 240  
 ttgtagcaca aatcatgcaa accagctcgg tgaatttttg agctgatgcg tgctgttatg 300  
 tctgttttgc tgatgcacct agttcctttg caaagctgta gtaacttggt ttgctcgagg 360  
 gcaatacaac agacctggaa taaatatctt gctttatctt gcttagaaaa aaannnnnn 420  
 nnttanaaaa aaaaaaaaaag gggccgc 447

<210> 5037  
 <211> 403

<212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F11

<400> 5037

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aaaaaaaaaa aaaaaaaaaa aaaaaataa acaaaaaaaaa aaaaacaatc aaaaaaaaaa  180
aaaaaaaaaa aaatcaacaa aaaaaaaaaa aaaaaataa aaaaaataa aaaaaaaaat  240
aagggtacc caaattgact caactttaaa ttcctctgat taatacatcc tgcgctcctt  300
acataatact ccaaacttat taacaacact gtcattgaaa aaatgtatca taggaaaaca  360
cctgcatttc gaaaacttaa acccatttta aaaaccaccc ttt                               403
  
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<210> 5038  
 <211> 365  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F12

<400> 5038

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tttgtttttg ttctgtttgt cgtgggtacga ggaaagatta ccaagtagat aaggtctagt  180
agcagtttgg ctgtacctaa tcagtaccct tatttcattc cgactagtaa gtaaaaaactt  240
gttttttcct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  300
aaaaaaaaaa aaagcggggc ctctaaagga tccaacctta ggtacccatc tatgctacat  360
caaaa                                             365
  
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<210> 5039  
 <211> 350  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F5

<400> 5039

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 tgcattgcat attagtagta aggaatgcgg ctctcgtttc cttgtctttg ccccgaaacca 180  
 gaagaagcgt actagtagac gtagttgctg aagagcactc atggaatcct cctccccctgc 240  
 tgctaccctg tctctctccc gtgtgtcatt gaaacatctt tctttctgtg tgaaaaaaca 300  
 agaaaaatta aaaggatcaa accaagctct tcaaaagcat taaggcaaag 350

<210> 5040  
 <211> 185  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F6

<400> 5040

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 gtgcatgcga cgtaatagcg cttcaatggc gcccggtata ctcatccac agggcgatc 180  
 ttac 185

<210> 5041  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F9

<400> 5041

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgcccaaag gttcaaacct 180  
 tacttacgct tgcattgcaac ttcaaacctc ttcaaaattg tcaccaaaat tcatttcact 240  
 ggctttcttt ttaaaacttc ttaacgggaa aaacctggc tttaccaat ttaatccct 300  
 tgcacaaat ccccttttcc caagctggct taatacaaaa aaggcccgca cctttcgccc 360  
 ttcccaaat ttgccaccc taaatggcaa atgggaaccc cc 402

<210> 5042  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-G11  
  
 <400> 5042

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 ccttatgaac aagagtatag tgattgtttt taccatgggtg tacagaattt ttatcaaagt 180  
 gccatgggtct accaagtaat aaggaaatg cttgcatagg taccacatca caatcaacat 240  
 aatcagcata tgtaaagata ctaaaatgca cacgaacagt acgtgttacc ttaaccttgc 300  
 cgctgttgtt gaaccattgg atgtagtaag gatgtggatg tgggtcttgtg gtgagagaaa 360  
 gcttctccac catctcc 377

<210> 5043  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-G9  
  
 <400> 5043

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 taccgggagc tggagtggga cttccggctg ccgctggtga agagcatcaa cgtcagcggc 240  
 cacaagtacg gcctcgtcta tgccggcgtc ggggtggatca tttggaggaa caaggaggac 300  
 ctgcccgacg agctcatctt ccacatcaac tacctcggcg ccgaccaacc aaccttcacg 360  
 ctcaacttct ccaa 374

<210> 5044  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-H11

<400> 5044

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taccgatgga cgaagacgaa agaggggatg cctcccgagg cataccaag cttaggcttt 180  
tcgttgctct ttaattttac cttgggggtgc cttgggcacg tccaagctta ggctcttgcc 240  
actccttatt ccataatcca tcaaatcttt acccaaaact tgaaaacttc acaacacaaa 300  
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ctgttatgaa ctc 373

<210> 5045

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-H5

<400> 5045

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tttcctacca atctatcccc ctaggagcat gcgcgtagta ctttgtttca atgactaata 180  
gatttttgca ataagtatgt cagttcttta tgactaatgt tgagtccatg gattatacgc 240  
actctcacc ttccatcatt gctagcctct ctagtaccgg gcaactttcg ccggtaccat 300  
aaaccaccca tataccttcc tcaaaacagc cactatacct acctatcacg gaat 354

<210> 5046

<211> 412

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-009-Q1-E1-A4

<400> 5046

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cccggatgaa ggggtgggttc tatgtcagtc ctgaggctaa gctgtgtttt gttgtcagaa 180  
tcagaggtat caatgccatg cacccaaaga ccaagaagat cttgcagctg ttgcgtttga 240  
gacagatatt caatggagtg ttctgaagg ttaacaaggc caccatcaac atgctccgca 300  
nggtcgagcc atatgttgca tatgggtacc cgaacctgaa gagtgtgagg gagttgatct 360  
acaaaagagg ttatggaaag ctcaacaagc aaaggattcc tctggacaac aa 412

<210> 5047  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-A6  
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caggtggtct gcgccaaagt caacgacctc cacgacaagc aggggatgaa ggagtgcctg 180  
tcgtgcgga cctcatcca gcgcagggtc tgcgcccga ccgtgggctg ctgagtgaga 240  
agagagagat tttgcgttcg cgtegcctgc gctataccgt ttttcctttt ctttttgatg 300  
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<210> 5048  
<211> 409  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-A8  
<400> 5048

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cgagaccgtc gccgaggtcg tgaagggcaa gggctatgtg gagaacacgc ggctgggcaa 180  
ctggaagctc ctgatcggga cggccgtgat cgccatcgcg ctctcgcgc agttctaccc 240

gaagaagttc cgcgagaacc gcgagttcct gtcggttgc atcgcgctgt atgtggtgat 300  
 gaacgtggtg ctactgatcc ttagctatac caaggaaaag gatgccatca tcttcacca 360  
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<210> 5049  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-009-Q1-E1-A9  
 <400> 5049

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 ggaaatagtg cataacactt gatgggttct cacacacttc tctcatctca tttttggtgg 180  
 caaatagtagt taagtttttc ttgtcgctca tcatggaggc actcaatttt ggcttgtggc 240  
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 tgtcggcgat cacttgactt ggtgacatan gtcgtagcac gtactccttt cccttcactc 360  
 tgaagctata gtgattggtt cgcccattgt agatgacgca ttggtcaaat ttccatgac 420  
 gtccaaga 428

<210> 5050  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B12  
 <400> 5050

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 tattccgtaa atagtcatac atgcttatgg aaaagaactt gcatcacatc ttttgccta 180  
 ccctcccatg gcaacggggg cctagtggaa actaagggat attaagtcct acttttaata 240  
 gagaactgga ccaaagcatt aacacatagt gaatacatga actcctcaaa ctacggtcat 300  
 caccgagaag tatcccgatt attgtcactt cgggggtgtc ggattataac acataatagg 360

tgactataga cttgcaagat aggatcaaga acaaacatat attcatgaaa acataatagg 420  
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<210> 5051  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 5051

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 gatcctttgc aatttgtggtt ccgaccatat gttcttcttt gattccatat ggaacactgc 180  
 tacgatagca taggtatgac tatcttgatt ctgtcataaa atcgatcatc atgtacatgc 240  
 atgatagaaa acgtgacctt ctgtgacaaa cacgtatcat cacggaagtg tatttttttg 300  
 tagtggaaga ggtagcacac gtctccgggg tgtgggcccc ctcatagacg gtgccgccgc 360  
 aggcacctag aggggggaaa tagccgcacg aggtctacgc ggagggatcn tgctatgggt 420  
 t 421

<210> 5052  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-C3  
 <400> 5052

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 ccacggtgga agccgtgtcg gagggcgtgc cgatgatatg cctcccggtg cacggagacc 180  
 agttcagcaa cgccaggtac gtgtgcgatg tctggaaggt gggagtggag atcgaagcgt 240  
 catcagcggc tgggcagAAC ctggagagag ggaagatcaa ggctgccatc gacaagattg 300  
 tgcacgacaa agggattaga gagaggatgg atgccttcaa attagctgca gatgaagcag 360

ttaactccca aactgaggtg aaag

384

<210> 5053

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C5

<400> 5053

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atatggatgt agtgatatta aagttatgct agttgggtga ttatgaattt aaagaatgct 120

tgtgttgaag tttgtgattc ccgtagcatg catgtatggt gaaccgcttt gtgatgaagt 180

cggagcaciaa ttttatttat tgattgtctt ccttatgagt ggcggtcggg gacgagcgat 240

ggccttttcc taccaatcta tccccctagg agcatgcgcg tagtgctttg gtctttgatg 300

acttctagat ttttgcaaca agtatatgag ttcttttgac taatgttgag tccatggatt 360

atacgcactt ttacctttcc atcattgcta gcttc 395

<210> 5054

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C6

<400> 5054

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cggactgcac agacatacct gactcaaaac gccacaact ttttcatacg gactccgaat 120

tgggtgattc tttttttgtt ggaaactaga ttctgtgctc tttccaacac aattggattc 180

acctttaaat tcgtccggag cattgagtta tggtcgaaac aatctgacgt tgcaccagaa 240

tccgagtcaa actacaagtc caaagggtgtt gcacacctc cacttgggcc catgtgcctt 300

gtacgaccta gggttggttt taggctgcct tgggacgtcc tcccacctcc ttggacgcca 360

cccttggttc ctatataagt agatccatct agtagctttt t 401

<210> 5055

<211> 428

<212> DNA



<400> 5057

cccggtcga cggggaacct tggaagcagc ccctcccaa ggacgatgac actattgtca 60  
ttgagatctc acaccaaggc caggtgacca tgctagcaa cgaaccctgc aagtcaatga 120  
gcctcagtga cccgttgctg tcacacggcc acaacgacca cagtgcgaa cacaagaacg 180  
acgtggatga cgaggagtgg gaggatggca ggaggaagtt tggggctgcg gagaccttca 240  
agctccctga tgagatcgac attgctcatc tcagctgagc tgcatatcca ttcttatgac 300  
aaagatcata tcttgccggt tcacaatatt tgtccagtaa agtgatatca ctatatgcaa 360  
atagcttcat gcaaaaccct gtatagctgg agtttagtga accaagcgcg gaacaactaa 420  
ttttaatt 428

<210> 5058

<211> 305

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-D8

<400> 5058

aattcccgga cgcacgggaa aaaggagaag attcaggtct caggtgggtg agatcgacgg 60  
ggaagaagaa gatgcaacac aattatatct gggaatatag aattgtacta cgtagtagtt 120  
taccgtgctg ctttcttttc ttttttggtg gtagatctga tgtctctacg tatgatagat 180  
accgagtgtg tgggtgggtg tctttccatt cttttgggtt cgtgggtgcc atgtaaatgt 240  
tgggtggatcg attccttatg tttttgcctc ctgcggtaaa taaaagctaa tgcagattcg 300  
tgatt 305

<210> 5059

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-E3

<400> 5059

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ggagccaatc cctctgctga tgggtggaggt gatgatgagg gtgtccatta ccaggccgtg 120

acggtggttg acattgttga cacgttccat cttcatgata acactgcttt tgacaagaag 180  
cagtttatct ctcacatgat gcgctagatc aagaagctct ctgccatgct tgaaagggat 240  
gacctagatg ttttcaagaa gaatgttgag tctgccacat agtatcttcc tatcaagctc 300  
aatgaccttc aattcattgt tggcgatagc atgcatgatg atggcagcgt ggtgttcgcc 360  
tactacaagg agggagctgc tgatccaact tacctgtact ttgcacatgg gctgaaag 418

<210> 5060  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-E4  
<400> 5060

gggtcgaggg gcttgctaac taaatggcaa ttggcacata caattcgtcc agttgcttct 60  
cgtgggtttt cataaccctg ctgcgcaaaa atgggatatg catttgaaat agatgtccga 120  
gttattacgt atatcatgat cgatacagaa atcgatcgag ttatctgttc ctttaccocaa 180  
gaaaaagtat ttctattttc catgtccaat cgcagatccc agaatttcta caataaatta 240  
gataggtagc taagctaate tagttcccta tacacgaate tgttgtcatt ctactgcaac 300  
agttgtactg caatgatgaa taccttaaag taggtataaa tagaaagaat ttgctaaaa 360  
tggaaaaggg ctttctttct aaaaaaagat gcttgctaata ttgattaata ttaatatcgg 420  
gagatcgaat gaattta 437

<210> 5061  
<211> 416  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-E6  
<400> 5061

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agaaagttac cgcaaagat aggatttcag ggaggcttct aaatggtcgt gctggggacg 120  
caacaataag agaagcttct aatactgagg atatgaccta cagggaagca ttcccaaatac 180  
agtggcagtg aaagcaccct gagtaggtct ttcttcataa ttaacagttt tgttttgctg 240

tgctgttgca tgcttgaagt gcttgaagta cgcgggggcac tgaagctgct tcgaacccgt 300  
 gcatggaaaa tttcagaaaag gaaagtcgta gaccatttgt attggcagtc ggattgagaa 360  
 tccaaatcag aacaacgcga cagtaaataa gcaactcgatt ttgtgaacat gccaaag 416

<210> 5062  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-009-Q1-E1-E7  
 <400> 5062

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 ccgtgtagtt cgtgcgatcg aggccccgtc atgttcatta aatactgtac atactgtcta 120  
 gtagcaccgt gtgtgctggct tggcctcgaa tctcgatgta atataagacc tatgtaattc 180  
 gctagcatca ataaagcggg tgtttctata ccatgttggt gtgtattgcc agaagacttg 240  
 atctccgggc tggcaatgca aggtaaaccg gttgctctga gccgggggtgc cacatcccca 300  
 taaagctaaa tgtggctgca ctgagaataa ctcgattcag tggcaccatg actcgattaa 360  
 cattatattc aagtgggatt attatcaggt ttaacttgaa aataaaatca nccaag 416

<210> 5063  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-F3  
 <400> 5063

gggtcgactt ccaccaaagc gataaccatc atctcatcga aagacgggac acctttgcct 60  
 ctatcaagtg gtatcagatt tccaggttgc tcggtgagat ttacagttt ttcatagttt 120  
 agatcgagtc tgttcttcat acctacagtc cagcaaaaag ccacaaaaaa aaattagggt 180  
 tagttcatca tatccgaacc aatctgagcc tttgcataat ctttttaggg tttttgcttt 240  
 gttgaatttg cggttgcac gtcgtgtcaa gttgctggtc ttagagtcta gtcttttaga 300  
 gtttcgagtt ctggtcataa gttgtcacgc cgccgccgca ccatcatcat cgctttacca 360  
 tctaccaccg ttgcttatcc accaccgctt tgaatccgta tccatatacc aacaacgctg 420



ccataaaata acggca

436

<210> 5064  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-009-Q1-E1-F5  
  
<400> 5064

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attgcttctt cagatccgac ttgtgctagt agcacttgat atcttctttt cacgtacata 120  
gcaagcgggg atcaaactct gtagcttacc atgatgagta ctagtacttc ttgataattt 180  
ggtatgggct agctgactag ctcaagtctt acgcggcccg ttcagacggc gcaacagaca 240  
cgggtggctt agcttggagc aggcgaccgc gacccaacat gcaacaagag tcacccgagt 300  
ccgtgctcac gcccggtccc ttctccaagt cgcggccggt ttgaccaatc cattccagtc 360  
gtgggtgata tctgattttg tgcttgactg taecgcgctg gattcgatcg acagcgtgt 419

<210> 5065  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-009-Q1-E1-F7  
  
<400> 5065

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gcgaaggact tcaggaacgc cggctcgtcg cgatggccga cgccgtgaat gcccttgtga 120  
gagccctcgc gtgcccgta gagctcgttc gagggctctg cggcgcaccg gggcatctct 180  
gctgcggctg cggcttcgtg gcgggacctc tctagtgtt cgcggccctt gatctttgct 240  
ggctgggttat atgtccaccc taaactcctc ctaccggtca tgggtggaatg acttgacagg 300  
aaagaccagt tttgtgggtg atgacgagag gaactgtgaa gtaattttcg agtgggtagt 360  
ttttatagcc cgatgctaag tgtgaacacg tattagtttg atagggtgta acagatttg 419

<210> 5066  
<211> 379

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-F8  
  
 <400> 5066  
  
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 gcgacgctct acactgggtct tgttgtatgg tagtcagtgc taagtttctt aatgtcattt 120  
 catatatatta tcctttccat tttgagtcgc tgaaactgct gagtgatgtg cagtttgctc 180  
 tgttagtcgc tctgtcactt tcacttttca tattctttgt tgtgtagttc ctcatactgc 240  
 tctttcttcc tgagtctcgg aaagaataat aaagagccat gtgtaattct aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaattaa aaaaaaaaaa ataaaaaaaaa 360  
 aaaaaaaaaa agcggccgc 379

<210> 5067  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-G1  
  
 <400> 5067  
  
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 cgaccaacaa cggcgacatc gtggacgcct aagcaaagca atgagccacg gacaccaagg 120  
 cgtacgtacg ctggtgtttg ggggcgcaag atcaataaga tggttcgggtg aaacggagga 180  
 tgcttaggga cgagggttg tttttgtgat ttgtcagact cgtgtttaat tccgatgttt 240  
 gtcttttagtt ttcttgtgtt agcgtatatt gttcatgcca cctgcccgcc atgtgctctg 300  
 ccctgcctct gcctcgcggc agttccatgg atgatgaatc cttctggaac aagaggaggg 360  
 aataaaaagg ttgagttcg 379

<210> 5068  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-G11  
  
 <400> 5068

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 aggtcccgag gcatcgattc gtggatgttt gtgatattcc catcgtgtga aaaccaaagg 120  
 catgttcac tactagtact actgacgtgg aggcagtacc tactaaagta ctatatttca 180  
 tatttataaa tccttcaatg gctgttgagc actacatcta ctgatccatc aagccatcac 240  
 gtcaaggcgt gtgccgatct caacacagag atcaaggaat actacagata caagatcaga 300  
 tcaacatggg tctccagacc agcgatgacc cggacacgga ttaattaaac caaccatgat 360  
 gtggaggaag actcggattg gactcggatt ctgacatctc tg 402

<210> 5069  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-G12  
 <400> 5069

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 aagttcttgc tggagaagca ggagtcgtac cggaggtacc aggagatgat cgccaggagc 120  
 atatgaacca cgagatccat gacgacccat cgagggttca tccattgcgc cgggcggctt 180  
 ggtgtccgga ctctgagcat ccggagtact acgtgagtag gaatttgatg ttgagcagtg 240  
 agtaattcat ggtgcagctc ttcgtggccg tgcctcgaaa ttggagtcgt tttcgtctgg 300  
 ggcgtgtcgt gtgtcgtgtg tcgtgtgtcg tgtgtgcgtg tgatgattta atttggtgga 360  
 ttcattgtaag gttgggttac ggtcgaagca aaattattct tcgggaggac aaaa 414

<210> 5070  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-G3  
 <400> 5070

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 gaagtcggca ccacatttct catttctgtc aggtacaccg gatgctgata gcaaagcagt 120  
 gcactgcaag ttggagatgg tttagcagag gcatgttctt gtcaagcgtc gttgctgcac 180

gcaggggctg gccctgcatg gattgatgta tttttacact caagctcgca atgtaacacc 240  
gagatttggt gttctctagc atctactact atacgtgatt gcaacgaacg gaccaagaca 300  
tctgatgaac acttgtcatg tttccctgtc gaacatcctt aatatatcaa gaagcgttgc 360  
tgctctgtat ct 372

<210> 5071  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-G6  
<400> 5071

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ttggtacgtt aaataaagag tttagtttcg tatttacaca atttaaatg attgttatgg 120  
agagaataag aaaaccactc cactatatat tagtcgtata cacgagtact atatggacgc 180  
agettcattg acttttagtgc acttgccctt gggtttatga taggtggggc caaaatgtgg 240  
ctggcccacc tgtcatcacg ccaaaagcag gtgcagttaa gacactggag ctcaagtccgt 300  
actacagtat atatataagc tggagcctca gcacttgctt tctagggctt gcactctcca 360  
cactctcgct gcactacata tatatatata cgctgg 396

<210> 5072  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-G7  
<400> 5072

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agagtgtaca atatggaaag cgtccttgag ttatacagaa cgtgccagct tccttttgtg 180  
atcggggaaa gaggggaatg gggatggata acacggaaga gcaacgcaat gcatgcatcc 240  
tatcttcaat agtctgtaaa agtttttggg atgggcactg ccggtgaagca tgaaatatgt 300  
tggcacttgg cagtcttgta ttgttttgat ttcgttgtgg tttgaggcga gtacttggat 360

taccaacacg aagcaacggg cttgagggag tgcagatact tcgttgatgc tcgacgaatg 420  
ga 422

<210> 5073  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-009-Q1-E1-H11  
  
<400> 5073

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ctgggaggca ggcgacctc gaggcacggt tacttcgacc actttctcct acgacaacat 120  
aactggatgg attactaatt gcagcgcata aattatgttt cattagcata accatcgcat 180  
aaccaggcat gaatgtccca tcattatcag gggtttattct cttcaactat ttttgcgctc 240  
atgtgctcat aaattttatt attagagcaa aatcagcata ttctctttta ctagcacatg 300  
cccacaattt tttccatta tagccaaccc gcatattgtc ttttattggc acgtgcaagt 360  
tatctccagc aataatttgt ggagtcctc attctgctca taattctcga nacaacctcc 420  
ttattctcaa ataacctcct taatt 445

<210> 5074  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-009-Q1-E1-H5  
  
<400> 5074

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gatggtatct cgctagccct ttctgagacc gcaaaacata aatgcagagc acctttaaag 120  
atcaaggact gactagacat tgtaattcat ggtaaaagag atccagacaa gtcataactca 180  
atgtaaaacta acagcaatga atgcaaatga cagtgggtgct ctccaattgg tgctttttta 240  
taagaggatg atgaatcaac ataaaactaa atagataggc ctttcgcaga gggaagcagg 300  
aatgtgtaca ggtgccagag ctcggttttg aaataggggt gaataatatt ttgagcggtg 360

tacttttcatt gtcaacataa caaccaagag atggcgatat cttccatgct atacacatta 420  
tacgcagttc ccaaac 436

<210> 5075  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-009-Q1-E1-H7  
  
<400> 5075

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tcgagtacgc caacaccaag ctccgcaccc gcacctgcac cgatggggga aggaaccctg 120  
ccttcgacga gaagtttcat ataccactca tcgaggggct ccgtgagctg agtatcaacg 180  
tgtggaacag caacacaatc aacactgatg acttcattgg cagctgcagg gtgccactga 240  
acaaggtgct cagcagtggc tacgatgggt cctcgtggcc cctccagaca cgccatatga 300  
agtctgctgg ggaagttaag cttatcatgc actttgatgt ctcagcaatg aagaacaaga 360  
tggcaggtaa aacttctggc cagtacgctc ctttcgcata cggcgctcc tcagcttcat 420  
acccagc 427

<210> 5076  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-009-Q1-E1-H9  
  
<400> 5076

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aagaggaaag tgaacccgac gcactaccgg gagccgaggt tctacaccaa ggtgtttaag 180  
gaatgccact cctatgacca agaggggaat tcctttgagc tttctctggt aacttccaag 240  
tgcattggag cttatgtgaa aagcaagaag aaccagaacc agatatgttg gctgtgggag 300  
aaggtcaagt gcacagaaga caaaggcttt cagagattcc tngngaagt gcagtacaaa 360  
tccactggaa tcttgcgtta tgagcgcgtg tttggggaag gttatgttag caccggtgga 420

ttcgagacca c

431

<210> 5077  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-A12  
  
<400> 5077

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gacatgaaat ggtaaggcca cgcttgggag ctctggtttg tttcacacct gtattaagat 180  
acaggtgtaa tttactcgtc atcggaaca atgcgtaaag tacaggcgta atgaaaccga 240  
gggcccggag tctataagta aaaccggcag gttacgcgtg taatttgaga gaccggtgta 300  
tattttacta gtcgaaatcg accaaccaag cgcttcgccc gagaccatct gcttttattt 360  
acaagcatca gttttacatg cggttttggt tgggaaacga cgat 404

<210> 5078  
<211> 239  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-B12  
  
<400> 5078

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actaatcact tagccgctca ggtgaatcta ttcgtagttc agagtacggg ataggagggtt 180  
agacgtttac tggtgacgtg gtgtactcca tcacctcatg atttatacat gatgtcctc 239

<210> 5079  
<211> 192  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-B4  
  
<400> 5079

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 tatatgtgtt gttatttgaa ttgaattgat ttgaacacaa acaggataga gaataactag 120  
 caaatgcaaa cgatgccgac ggcctagccg tctgcataag gccaacgtga gctcccagta 180  
 gctcgagtt aa 192

<210> 5080  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-C12  
 <400> 5080

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 gctggtggta gcggcggcgg tgggtgggtgc tgcggtggtc gcgttccacc ggaggccaac 120  
 cgcagaactc gtgtcgcccc ttaccgcgag ccttcgcgaa ggtgatggac gcgccggtgc 180  
 tcgtgacgtg cacgcaccgc tgcgcttgta ggagagagat cagagcaaga agagagcaac 240  
 cagcgtgaaa aaaaacatta gcaaatcaga attgttgtc gatccccttg ttgggggtggt 300  
 tacaacttag tgtttagatc atctttgatg acaattgacg ccgtcgatct gtttaattgt 360  
 gttccttttg ctggttggtg cttcagtcgc agccaagaat tggcgtgga 409

<210> 5081  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-C4  
 <400> 5081

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 aagcagatga ggatgttggc aaaattgcac tggctgtgcc tgttttagtt tcgagagccc 180  
 ttgaattggt tctgcaagat ttgatcgacc actcatacaa aattactctt caaagtgggt 240  
 caaagacact gaattccttc cacctaaagc aatgtgtgaa gaggtacagc tcttttgact 300  
 tcctaactga gattgtcaac aagggtccag atctcggtgg cggatgaatct ttgtgaaaat 360



aaaagaggat taccacaat aaaggaaatt ttcaaattgg

399

<210> 5082

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-C5

<400> 5082

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cgaacctatg ggataacctc cgatgatagt tgatttgatt ctgctgaaaa acagaaactt 120

tgacgcgacg aatataatgt tgttaaatca caggaacgta attttgcgtt gattcttttt 180

tatgctgttc aataaacaaa ttttccagga ctctctatgt tggtaggatt tttagatttc 240

cataagtttg cgtaggttac aggttgctac agactgttct gtttttgaca gattctgttt 300

ttcgtgtggt gtttgcttat ttcaatgcat ctatggctag taattcagta tatgaacct 360

aaataagttg gagtaggttt aacacaaaaa taaataaaca atgagttcat tgc 413

<210> 5083

<211> 206

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-C6

<400> 5083

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attgtgtgga aagctctatg gtatgcaggc aaaactacgt gtttggtaaa tcagatggaa 120

gtgggatcgc gttaatgctc ttctagagag tgatctgtac aactttgcga ggagttcatg 180

atatgataag agtttacaaa tttcca 206

<210> 5084

<211> 390

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-010-Q1-E1-C7

<400> 5084

gaattcccggt gtcgacgggc acggcaggct gtagcagtgg ggatcgctag tagggatgcc 60  
acgttgcaag ggcaggatcc tgggcgtccc ctggcgctgc tgccctgacg accttgctgg 120  
aagttctgtg gcgtcgctgc cctgacgacc tcggggaagg aagcgacact gctcgcggaac 180  
ggctctccatg ttggtcggca acaatggcga tgacgttggc gaaccgtgat tgtacgggggt 240  
ggatggggggg tgctggaagc ggaacacggt cagtcaaggg aaaagggcct tgtgtgatgg 300  
aggcgtgcgg gctgtgcgtt cccctggtga acgaatctgt atcgacncca tcgtactgaa 360  
cgactcatgt ggtacaaata taatactggg 390

<210> 5085

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-D12

<400> 5085

tcaagaagtc ccgggtcgac ggggacgacat gagctcaagt tcaccggcat gcccaactac 60  
ctcggattca aggtctaaac gcgcattgat atgcattgat gcaacgcctg cccctgtac 120  
atgagatacc gatcgaggta aacgtaattgt gtgtacggaa cgtgtgatga ctgatgcttg 180  
caagatcagc aaaccttcgc tgctccgtta tcaccttctg ttcttttctg gagttctctt 240  
ttccctggta aatgattaag tgtatgttgt gagttgtgac attgattaac tggaaaatgt 300  
atcattcaga tgccattaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaac 360  
aaaaaaataa aaaaaaacgg acacccaaaa gg 392

<210> 5086

<211> 436

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-010-Q1-E1-D2

<400> 5086

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gtcaacagcg tccgcctcgt cattttgcgt cagcacaact ccgctgtggc tgccggaggg 120

aatagaggag aaggcaggaa ggcaccagaa ggggacgcag tcaccgccct aggtgccgac 180  
ccatcagaga cgcagttgat gatggtgcgg cggagaagac gacgaaagca caagagttca 240  
aattcagtcg tcacgtccg cttcactccc gctacgactg agggggaatg ttagaagtat 300  
aattatgttt aagttagaga taggattggt ttaaaccaca tgtaacttgt cttgtactcc 360  
aagtctctat ccctcatgat gtactctata ttatacccta tganggtcag attcaataaa 420  
ccattattat caaccc 436

<210> 5087  
<211> 420  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-D3  
<400> 5087

ggtcaagaat taacgggtcg acggggcccg acatcgtgat agtcgacccc ttctacatgc 60  
gtgccaagat cttgggcagc gctggggacc ggcaagtcgc gagttcttac ctggaaggtg 120  
tcattctggc aaaccaagat aaggacaact tcctcatgcc ttactttccc gagtaagtcc 180  
tccctcaac cgccccgtaa catatgaatt cttagatttc gatcgttttt attttaacat 240  
tccgtgtttt ctgcagtgc acacattgca cgctcactct cctaagcccc aaatattcca 300  
tggccacgta ttctgacccg gaccgtcagt cgaacgtaga ctacacaaat gtcaagaagg 360  
ttcttgatga tgttctcccc ggctacgtca aatatggagg caccttcacc aggcctaata 420

<210> 5088  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-D4  
<400> 5088 /

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atgtgacgtg tgctatggcg ctcttgggcc tcacatgaat gtgtcttgca gtgcatatgt 120  
aatgaatgtg actccaaatt tgtacagcaa acggtgctga ctactgcaca atgacgtctg 180  
atcgtctatg tacaccatgt ctgtacaatt tacaccgtga ttaacagcgg tacactctct 240

tttgcacata tccagcagag atcaacgaaa cgaaggccgg cactgttcaa aatttgtacc 300  
 cacttcgaaa agtatagatt gattgtatca catgaaactg tgaaatctga tatatccatt 360  
 caccactcag tgtgaagtaa agtatgtcc 389

<210> 5089  
 <211> 175  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-D6  
 <400> 5089

cctatagtga gtcgtattag tcatgagagc gatcggcgtc atgcaggacc ttttcctaac 60  
 caagacgtgg taacatcgta cggagtaccg cgcgtaattt ttagtttgtt tcttcttcag 120  
 gtggtggatg tccatcatgt ctatgagcac aggcttctgg gttttgacag agtct 175

<210> 5090  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-D7  
 <400> 5090

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 atggcgacgg cttcatcgac ttcagcgagt tcatctcctt ctgcaacgcc aaccgggggc 120  
 tcatgaagga cgtcgccagg gtcttctgaa tcagttcatt tcacctcaac cgteccgatcc 180  
 aggagccgat ccatctacgt acggcttcgt aaatcaattt catgcaacta cctactccgg 240  
 tcccgatcca gcctcagctt cacctgaggc cggccctaatt tttgtttgat caattttttg 300  
 ctactagtag taactagtga tgattactgt tgcaccattt acttatttta taacgtcaca 360  
 actttccagc gtttcttttc attctctacc tttttgtcga 400

<210> 5091  
 <211> 320  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-D8

<400> 5091

atagtgagtc gtattatagg cagtcaagac ttccagctcc accatctcaa gtcctgttc 60  
ccactcccaa taatggctctg tgctacaagt gtggacaacg aggtcatcgt gccagggact 120  
gcaatcagaa tcagaatcaa cttgcccttg cagcatcggg ccgtggtaac aaacagcccc 180  
gcagcaacaa cgctaagtcc taccgtcgtg ctcatgctaa atacgttgat ctcaaccaag 240  
ctcactacca gccagctact gtgatcggta cactcctcgt aaattcagta ccaggaaccg 300  
gtccgatgtg acacaggtgc 320

<210> 5092

<211> 342

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-E3

<400> 5092

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gatcgtacag ataactactg gtatataatc tcatccccga tcggtgaatt actctctcct 120  
cgatcatgat agcgccggca tgatgaacat ggccattcat gtgaacgact ccctcgccgg 180  
caaggttact tcatgggctc acgagatggt ttgtgggtggc tacagaggcg tgcggtaacg 240  
gagctcccga tctatgtgat gtcttggggg tttctgtagc tcttggacgc tttggcatct 300  
gaagcttgtc gtgggctgca ccgaggctac catgaggtac gg 342

<210> 5093

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-E4

<400> 5093

ccgggtcgac ggggcatctc tacaaatctt aactccagaa atattaccat tctcctcggc 60  
attagctaga agagccgcca gccctctgt acatagcaag aataaatatg gagagagagg 120  
atctccctgc ctcaaacctc tagtaggttt aaaactctca gtctcttcag tattaaagcg 180  
aaccgggtac tccaccgaag atacacattg cataattaaa tttaccagc tctcttgga 240

tcccaatttc aacataatat ccttcagaaa agaccactct acccggtcgt acgctttgtg 300  
 catatccaat ttgatggcac acataccctc tttaccattc cttttttctt tattgtatgg 360  
 aaacactcgt acgccactaa aatggttatct gt 392

<210> 5094  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-E5  
 <400> 5094

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 tatgtgatgg ttatatTTTT gaattccttc atgatgttac tgaaaattat tatgagagat 120  
 gaacatatgc ttctacatat tgcaatatta tcaagtttcc tctctatgta ttgaaaatct 180  
 tgaagttttg cttattttac ctctctatgc tagttgatcc ttgctctcat aaattgtttg 240  
 ttcacaaaat ccctatgcat aggaagtggg ttagacttaa atgtgctagc catatgctta 300  
 atgatgctcc tgttatgttt caattcttat cttttatgtg agcatcatcg aaatcatcat 360  
 gactagctaa aaaggcatta aagaaaagct cttgttggga gacaacccaa tatttaccct 420  
 tactttttta aggttt 436

<210> 5095  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-E6  
 <400> 5095

ggtacaggtc aggaattccc gggtcgacgg ggggtataaa ccatagagaa gttggaatac 60  
 agtagatatt acaacaatat gaatttagaa tgagttcaca acagtaccta agtggtgatt 120  
 tattttcttg tactaacgga gcttacgagt tttctgttaa gttttgtgtt gtgaagtttt 180  
 caagtttggg taaagattcg atggactatg gagtaaggag tgccaagagc ctaagcttgg 240  
 ggatgccccaa ggcaccccaa ggtaatatcc aaggataacc aagcgtctaa gcttggggat 300  
 gccccggatg gcatccctc tttcgtcttc gttcatcggt aactttactt ggagctatat 360

ttttattcac cacatgatat gtgttttgct tggagcgtca ttttaattta atttgttt 418

<210> 5096

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-E8

<400> 5096

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gcgacagcat gtgctttggc tatcgaggcg gacaagctta tctgtgttgt cgatggccaa 120

atatatgatg agcatggccg agtcaatcgt ttcattgtcta tcgaggaagc agatatgctc 180

atcagaacac gcgctaagca gaggtaaaact gctgcaaatt atgtaaagggt tgtaggggag 240

gaggacatta gttatgccca caattttcct atcaaagagg agaaagagca agtatgagtt 300

ggaagagatt tcattcagtga ttactctgca tcctttcgga atggtgtggg tttcaataat 360

ggaaatggtc tgtctgggtga gcaagggttt gctattggcg gggc 404

<210> 5097

<211> 379

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-010-Q1-E1-E9

<400> 5097

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aggaattgtg cggtgccact gtgctgtgag gataaggatg tatattaggt ggaaaagaaa 120

acaccttcga attgtagcaa gctcgagctt agccccatctt cttgacgtac ccataactgt 180

aggtgcttaa agagttttca gcgtgggtgg acgcctcagg ttgtctacaa aaactaatta 240

ggagtactca gtgttttttc gaataaaaaac atctgtgtta ttctcacttt tattttaata 300

tattttatat gttttatataa aananaaaaa aaaagggtgag agtttaaaaa aaggaaaaag 360

aaagatagga aaaacaaag 379

<210> 5098

<211> 317  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-F11  
  
 <400> 5098

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 cttactctgc attccttaat cttcattcta catgtataat agcagacaca acagtataat 120  
 taggacatat atatactgca ggcaatatga atgacatggg gtagatatta atagatcact 180  
 tatagaacgt agcaactgat gatataattta tcgagctcgc gcagattgta aagctgcaac 240  
 aattcattca gttcaatttg tacatcgtaa ttgtttgaag tgacgctcat gtctaagttc 300  
 cgcataaata tactctt 317

<210> 5099  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-010-Q1-E1-F2  
  
 <400> 5099

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 gggagtcggc acgcagcaac gaggcggtcg aggaggcgcg gatcaagctg ctggagctgc 120  
 ggcaggtgaa caaggtgaag gcgctcgtcg gcgccttcga gaccgtcatg gacgacaacc 180  
 aaagccccac cgccgcccgc aagccgcggc tcaacctcgg cgctgaact acgagtacat 240  
 tcgatgagca tgaagctcga tcgctgcgc ctctctcttt atccccgcta ctctttaatc 300  
 acccatcaac ccaatttgtc gtcgtcgcac acttatctat aattacggtg tcgcttatat 360  
 tctgcaagga ngaagatgat ggaggggtta tcatcatgat 400

<210> 5100  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-F3  
  
 <400> 5100



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 gcctaagctt ggggatgcc cggaaggca tccctcttt cgtctttgtc tatcagtaac 120  
 tttacttgag gctatatttt tattcaccac atgatatgta ttttgcttgg agcatcttgt 180  
 atgatttgag tcttcccttt ttagttttcc acaatcatcc ttgctgtaca caccttttga 240  
 gagagacacg catgaatcgt gatttattag aatgctctat gtgcttcaact tatatctttt 300  
 gagctaggca aattttgctc tagtgcttca cttatatctt tttagagcat ggcggtgatt 360  
 tcattttata gaaattgatg aactctcgta cttcacttat at 402

<210> 5101  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-010-Q1-E1-F4  
 <400> 5101

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 acaccgacgg tgacggcttc atcgacttca gcgagtcat ctccttctgc aacgccaaacc 120  
 cggggctcat gaaggacgac gccaaagtct tctgaatcag ttcatttcac ctcagccgac 180  
 cgttccagga gccgatccat ctacgtacgg ctctgtatat caatttcacg caactaccta 240  
 ctccggtecc gatccagcct cagcttcacc tgaggccggc cctaaatttg tttgatcaat 300  
 tcttttgcta ctagtagtaa ctagtgatga tcaactgtgc atcatttatt tattttattt 360  
 atatatcatc acaagtttcc tacaaaaaaa aaaaaggana aaaaaaaaaa aaaacgggag 420

<210> 5102  
 <211> 263  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-F5  
 <400> 5102

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 tgttgtatga tatacagtgc aatatttctt aatgtcaatt catcgagtta acctttccat 120

tttgagtcgc tgagactgag gagtgatgtg cagtttgctc tgtagacgc gtctgtcact 180  
 ttcacttttc atatgctttg ttgtgtggat ccgcagagtg ctctttcctc ctgagtctcg 240  
 gcaagaatat tagcaagcca tgt 263

<210> 5103  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-F6  
 <400> 5103

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 ttatggcatt tccatagcca ttccgagata tattgccatg caacttccat catcatcata 120  
 tacatgactt gagaattcat tgtcttattg atttgcatga tcataagata gctagcatga 180  
 tgttttcatg gcttgtccgt tttgtcattg ctatgctaaa tcattgcata tcccgggtaca 240  
 ccaccggaag cattcatata gagtcatatc tttgttctag tatcgagttg taatatcgag 300  
 ttgtaagtaa ataaaagtgt gacgatcatc attatagagc attgccccat ggaaaaatta 360  
 aaaaatcaac aaaaagtttc cat 383

<210> 5104  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-F7  
 <400> 5104

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 tcagaagggt gcctactacg ccatccatca catgcgggcg atcgtaggg accatcatca 120  
 acttctgcta ccgagtaaac tcaaagattg ggccgcgagc gtgtcgga tccaggacgc 180  
 ggacctccga caagaattct ttccgcatcca gtcggagttt gcggaaatca tccatcaaga 240  
 tgtccttctg acctcggggc agttctacct caaaaatcaa ccgtccaaca gtgacatcga 300  
 cacaatgcta caaatgcagg ctgacaacga ccgttatctc atgactccca cgatagacgg 360  
 cggcttcacg catgctccgg tcccttgagt cgagtcgaaa 400

<210> 5105  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-F8

<400> 5105

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 aactcatcat catggtcgtt ccttactctg cattcgtaa gcatcactcc acatgtataa 120  
 cagcagatac actcttcatg gtaagacata gagttactgc aggcattcag atcgagatgg 180  
 ggtagatctt aagaaagcac ttacagaatg taacacctga cgggagactt agcgaactcg 240  
 cacatattaa tgagctggta cacttcactc agttcaattt gtgcatattc atgcctgac 300  
 tgatgctcat gtccaacttc cacataaata cattctttgg cgtcattagc tttta 355

<210> 5106  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-G10

<400> 5106

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 attgatgggt tgccttttat cattgcacat gataattttg atagatataa tatgcatgtg 120  
 cttgctgctc ctacttgcaa ttattatgag agaggaacta catctccgcc tctttatggt 180  
 tccaacacga taaaattgca agaactctgt tatactatgc attggccttt actatgtgtg 240  
 catgaattgt tcttttatga catgccgatg cataggaata gagttggact tcgttggtgc 300  
 atgatatatg tcactttgtg ctactacta aattacaaat cattgttaat taaaattggc 360  
 tttgatatac cttgggatct cgggtggattc gttacgtgag cactaaatgc ctagct 416

<210> 5107  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-G11

<400> 5107

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cttgttgtga actgggctgg ggggttgctg tagcttgtgt gtgcctgaag ctttatgctt 180  
ccaggatgtg atgggtccgag cgatgcggaa acgggtactgt aactgcatca tatgtttatg 240  
gtgtcgatcg ccttggggtga tatcatcttc ggggtgtact ctagaaacaa tgggtgcttga 300  
gctgtcatgg taaaagtaaa acattgcggt gtaatgctgc atttcacatg ctgggttagt 360  
tatgttactt tcttgctcgt gtacgccgtg gtgctagtga ggtggctcct atgttggcta 420  
agat 424

<210> 5108

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-G3

<400> 5108

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acctgatgat caaaggatgc tgtgtcggcc ccaagaagcg cgtggtgacc ctccgccagt 120  
ccctgctgaa gcagacctct cgtctggccc tggaggagat caagctcaag tttgtcgaca 180  
cctcttccaa gttcggccac ggtcgcttcc agaccacaga cgagaagcag aggttctacg 240  
gcaagctcaa ggcttgagct gccgccgagc atcatcagtt atatcatttt gtcaaaacga 300  
acatgtgata cttgattact tcccctgcct aagttttgta ctagttgatg ttttcagaat 360  
ctggctcatc ag 372

<210> 5109

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-G5

<400> 5109

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gcactacatt gatgttagtg thtagagtag gcaaatttgc atgtctcttg ctagttgatt 120  
 ttactcttct ccgaatcata acttgtgatg tgtgcaagta cagttaacaa agaacagcaa 180  
 cataaaagtg tgcaatagtt tggatccttc tgtgttgaat gatgaaatca tacttttagat 240  
 ccttctgtgt tgaaagatga aatcttactt taaaaaagggt aaaaccttaa aatacagtta 300  
 aagaaaaatg aaaagcccaa caaaagggtgc acaaatttca attcaagggg catctgttaa 360  
 aaaaatccgt aactgggaaa acc 383

<210> 5110  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G7

<400> 5110  
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 catgttcgca atgaaagata aattagatct ttccctggga gttgcaatag ggtcatcaac 180  
 acaaatgtcc atgtttggga taccattttg thtagtgata ggggtggatga tgggccagcc 240  
 catggacttg aactttcatc tcttcgagac cgcaagcctc ttaatgacgg tactggttgt 300  
 cgcatttttg ttgcaggatg ggacttcaaa ttgcttaaaa gggttgatgc tgtttctatg 360  
 ctatctgata gtcgctgcta gtttctatgt acattccga 399

<210> 5111  
 <211> 372  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G8  
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 gggcacgtac ggtcgtggga gaccaaggac agccagctga cgatggtggc ggacgacctg 180  
 aagccgcggg cggtgctgac gtgcccggag aagaagatga tccagcaggt ggtgttcgcc 240

agctacggga acccgctggg gatctgcggc aactacacgt ttggcaactg ccacacgccc 300  
aaggccaagg agattgtgga caatgcgtgc gtggggaaga ggagctgcgt gctggccgtg 360  
tcgcacgacg tg 372

<210> 5112  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-G9  
<400> 5112

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aagctgatcc tgcgggggct gcagttccac ggcttccacg gcgtgaagca ggaggagaag 120  
aagctgggccc agaagtctgt ggtcgacgtg gacgcctgga tggacctcgc cgccgccggg 180  
gactccgacg acatcgccca caccgtcagc tacaccgaca tctacaggat agccaagggc 240  
gtggtggaag gcccgctcgc gaacctcctg gagtcgggtg gcgagtcgat cgccggcacc 300  
acgctgctcg agtttcccca gatctccgcc gtccgggtga aggtcgggaa gccccacgtc 360  
gcggtgcatg gcgtcgtcga ctacctcggg gtggagatac tgaggaggcg cagagaggca 420  
tgagcacaag 430

<210> 5113  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-H1  
<400> 5113

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ccgggctcat gaaggacgtc gccaaagtct tctgaatcag ttcatttcac ctacgccgtc 180  
cgatccagga gccgatccat ctacgtacgg ctctgtatat caatttcatt caactaccta 240  
ctccgggtccc gatccagcct cagcttcacc tgaggccggc cct'aattttg tttgatcatt 300  
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atcacaagtt tcttttcttt ctctaccttt ttgtcga

397

<210> 5114

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-H11

<400> 5114

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gtcaggctta ccgtgactcc gggttaataga ccagataaga cgggactccg gttagtagac 120

cagataagac gggcagcaga agctcagact atatgatcat ggtggtaaac ggtggtaggg 180

ttgcagatca gcaacgcaga ctgcaacccg caagctgcag tggcagcgtc cgaaagagat 240

gcgcggaatg tacataagta gtgcgagcgc gtggaacttt tgtctgaaga gatgattttt 300

tcgtatgtaa ttgcagaatt tgactctctt ttttcgttta tctctgctta gccagcagtt 360

gatccgtgat ctataacggt ggcagtatat ttatga 396

<210> 5115

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-H4

<400> 5115

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tgggcatggt aagacaacag ttatgtaatc tctgttgcca actggtcagg tatgtgctgg 120

tttatgcctt gatgcagtat atcactttcc cgttcgtggt cagggtagca tgaaattagg 180

cagaatggca aaatcagcag catctactgt gaacacaagg cgaagagaaa agggattgct 240

tcctcgtccg gtaactcaat tgatttgttt tgcttcctgt cttttttttc tctatacatg 300

caaattatct gttctgaaac ttttccataa gaagaggtag actgtgcaac ttggttacga 360

tgatcatagaa gtaatgtttg 380

<210> 5116

<211> 409

<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-010-Q1-E1-H5

<400>       5116

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ctccgatggt gccgagattg gtcacttgct agtgctggcg gctcaacctg cggaatcgcg   180

gcaccgccat ggagactccg ctgacgggtg agattgtcga gttcaacacc aaggtgtgcc   240

tttctgggct ccatttcccc ccggttcatt ttgggttttc gtgcagtgtc gtgaggctgt   300

tgctctacat gctgggtgtg gtggacctgc tttgcagggt atgcaggagg agctgaagaa   360

gctgggggtc aaggtcaacc accatgaggc caacatcacg ttcctcaag               409

<210>       5117

<211>       406

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-010-Q1-E1-H7

<400>       5117

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ggtttttgca agagaacagg ggatacactt actcaggact tgaacgcgag ttatcattgg   120

ctgagttgaa cggctgctta gttgtggttc ataataatca tgacatatct atggacttgt   180

ggtttttgac agattttgag aaaggtcttt gggccaagaa atacagcttg ccttcacatg   240

ttgctaggct tttttggtat ccttttctca tgttggtatg tgggagaatt ttcttcagtg   300

ggatggattg tctggaaggc atattaagtg gtggagagca aggagaggga tttctgcaat   360

gttatgatcc aaggaatggc acatgtactg atgaagtaaa actgag               406

<210>       5118

<211>       433

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-010-Q1-E1-H9

<400>       5118



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 attacaggaa atctgaaccg actacgtaca tcaatgctcc cttggtaggg gttcttgctt 120  
 acttcgttgg caacccaaac cctggccgta tcagacactg agcataagca ctttgccatg 180  
 tagatagaga agagtgcacg aagctataaa taggtacaca ggaagcaa at aggtttgtgt 240  
 ttggatggca ctacatgttc ataggagtgg attgcagagc gtgtgttcta ccagtaatga 300  
 gagattagct ttaatgattt ctcttttgtt ttgggtttgc actgaatttt gtgtggatgt 360  
 gtgcaaagtg caatttgact gcactgggtg agtcacgagt gaagaacact tgcatttttg 420  
 cagaaatatt tat 433

<210> 5119  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-011-Q1-E1-A1  
 <400> 5119

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 actctcatgc ttcacttata ttatttttga gagtcttaaa caacatggta atttgctttg 180  
 gttataaatt tagtccta atgaactttc atataaagt cattgaatac tatgagaagt 240  
 ttgattcttt atgattgttt tgagatatga agatgggtgat attagagtca tgctagtgg 300  
 gtagttgtga atttgagaga tacttgtgtt aaagtttgtg attccggtag catgcacgta 360  
 tggatgaatcg ttatgtgatg aagtcggagc atgattta 398

<210> 5120  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-A10  
 <400> 5120

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 acaacttcgt tgagagcgaa ctgaggattg aacttggcaa agatgaagag gctcgagtca 120

agttgacgag aaatgcaccg gatgaaaagg gctgaggaac aacgatcgga aaaccaactg 180  
 cgtgaccta aagaaaattt ttgaagggga agagaagtaa ttcaaacac ctacgtcaag 240  
 attcctcacc agagcgacga aggggctgag gagtaaaaag aattcctact ctccgatata 300  
 ctagactcca aaaatagttt tcttctagac tcaacaacgg ccaaactaca cgatcaatca 360  
 agggggctcc taaggctcgg cgaggctctg ttaccaactt gtcatgccca atatcca 417

<210> 5121  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-A11  
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 tttgatgttt gggtaattcc catgcttaat cccttaggg tcatggaccc aaatttagag 120  
 cgaattgtag atatgggttt ttctcctcca aatgatcccc aaagattatc tctagaggat 180  
 gataaaaact cttatctcaa tgctcaactt ctaatgtgct ttttgatgct ttgagcaatg 240  
 tagttatatt tcaactcatg tcgttctggg atgctcatga gttgtggaca aagcttcaag 300  
 ataaatatgg tgtgttcaag atttgtgggg atgattgttc tccctccacc tccggccgtg 360  
 ttgccttctc aactt 375

<210> 5122  
 <211> 250  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-011-Q1-E1-A12  
 <400> 5122

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 taatccatt ggggtcacgg caccaaattt acagcgactt gtagataggg gttatttcac 120  
 atccatatga tccccaaaga ctatctcgag aggatgataa attctcgtaa ctcaatgcac 180  
 aacgtccaac gcgctttctg ttgctttgca caccgtagtt agacctcaac tcatgtgaga 240

ctgggatgct

250

<210> 5123  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-011-Q1-E1-A2  
  
<400> 5123

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tcctcaaaac atccaccata cctacctatc atggcatttc catagccatt ccgagatata 120  
ttgccatgca acttccatca tcatcatata catgacttga gcattttattg tcatattgct 180  
ttgcatgata gtaagatagc tagcatgatg ttttcatggc ttgtccgttt ttttgatgtc 240  
attgctacgc tagatcattg cacatcccgg tacaccgccg gaggcattca tatagagtca 300  
tatctttgtt ctagtatcga gttgtaatat tgagttgtaa gtannatana gtgtgatgat 360  
catcattata gagcattgcc cctaaaaaaa aaaaanaana aaaaaaaaaa aaagcggccg 420  
ct 422

<210> 5124  
<211> 190  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-A4  
  
<400> 5124

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ccaaagattg gcggtggcgg cggaagcgt tgaaagttga ttacgccata gacatagagt 120  
tgtgctgcct agccttggtt cctaacctac tagcatagac ctttgtcaag ttattacccc 180  
gccctcctga 190

<210> 5125  
<211> 441  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-B10

<400> 5125

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cccaggctgt attaccactt gccagaatac aatagttagc aggtacacca gttccagctg 180  
agctgctgag caaagctcat catactatac atTTtcttca tctacagggt tgtttcatgg 240  
gtgatggctg acatgttggt ggtgggcatt cttgtacttt tggaccagat tctttgatgt 300  
atTTTTtgat cttctgctta ttcttagata tatatacatg tgtatcctgg gtctactttc 360  
tgatcgaggc agtgaatcaa ccttggtttt ttctactgag gttgtgtgcc tatggtatga 420  
tgaaagctgc attcagaaaa t 441

<210> 5126

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-B12

<400> 5126

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ggcaccgtag tcgggccatg agtgattgta tgatgaatgt tatttatgta ctttgatgtg 180  
acgtggcgag tgtaagccaa ctatgctatt attccctttt atattatata tgtacttggg 240  
ttgtgttatg attcccgact tcgcacattg ctttcaatgc gcctatgtct ctaagtcgtg 300  
cctcaacacg tgggagacat agccgcatcg agggcgttac aaccggtgac cccgaaactt 360  
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<210> 5127

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-B7

<400> 5127

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ccagccagag acaccagcgg ccgaaacaac tgatgcctat gccgcgccga gaccgaggct 120  
 gtggaacaag aagattggcc atctccccct gccgcactaa gtccaacagt ttaccagtt 180  
 tctgagcgat caaccaaaaa aacttccccct ctcatctcac ttgaggagct actatgactc 240  
 tatgaccgga ttttataccc caattttcat tgtgtaaccg cttatccaca atgtaccact 300  
 tatgcaactc cgtttgcaagt gttattgtat tgctatgtaa agagaactca tgtacctgtc 360  
 atgtaagaaa aaagaaaaca ccaaaaaaca aaaaaagcg gccg 404

<210> 5128  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-B8  
 <400> 5128

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 agtggtttct tacgaggctg gcaaggccct tgccgatgag attgggatac cattcctgga 180  
 aaccagtgcc aaggatgcaa caaatgtgga gaaggcattt atgaccatgg ctgcagagat 240  
 aaagaacagg atggcaagcc aaccggctgg aaatgccagc aagcctgcca ccgtgcaaatt 300  
 gcgggggtcag cctgttgccc agcaaaacgg atgctgctcg tcttgatcaa cactcaagat 360  
 cacagtagtg ttcttgcaaa actcagttgg ttgttcttcc cctgtaaatt aagtgtacta 420  
 ctatcatgcc gtctgttgga agaagtgtca tgc 453

<210> 5129  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-B9  
 <400> 5129

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 gggcgaggat cgccacctac ctgccgggca ggacgggaaa cgacgtcaag aacttctgga 120  
 gcacccgcca gaagcggtc gccaggctgc tgcgcgcgcc tctccgcgcc cggcccagca 180

agaccaggag cagcaacacc aaagcgcccg catcctctct cgagtcgcc atgggttctt 240  
gccatgatca tgttccgtcc gtgggcaact cctccggcgg ccaaagcttc ccggtgcac 300  
cgcccatgga gcaccaggac accgcgcgaa tctcgcatga tcagatgtgc tctggattcc 360  
tcagtttcga gccattgccg ctgcaggcag cagcaccg 398

<210> 5130  
<211> 228  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-011-Q1-E1-C10  
<400> 5130

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tatgtcgcca ggtctccaca aagcaaaata ttgtaacatg taccctcacg tatacgaggg 120  
cacttattca aacagctact cctatgtaag cacagtataa cttggggtct gctcaagtgt 180  
tgtgatatac tattcataaa taaataaata tactatacag ttgttcag 228

<210> 5131  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-011-Q1-E1-C11  
<400> 5131

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cttcaatctc tgggtggatgc tccatctggg attgatactc ccatcaccgc tccttcacga 180  
tcggattcgg tgaatgtggt tgctccatgg ccagaggag cagctctatg tactccggcg 240  
cgaectccctc caggtgtatc gccgcctttt cgctctgttg cagatatttc gccatggatg 300  
tcgccgtcgc cgctagttgg tccttggttg caaaccaaga ctgtatctcc aacatcctag 360  
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<210> 5132  
<211> 285

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-C12  
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<210> 5133  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-C2  
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 tactagcatc acactaattc agatattatg aacaggcctg tatgtatgga ttgtgatcga 240  
 ctacacctta aggttgatc aatatgtgat gactgagact tccctgataa cgtgtgtacg 300  
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<210> 5134  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-C3  
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gggtttggga ttgaaataa aacgaacgga gatgtgccac gctcttaatc acaaaattaa 180  
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tcaccacaaa gtataacctt gtcataaact ggaaatgaaa ataataacca ttagggggcca 300  
cactaagtgc tttcattcac cataccatca aaagtaaata actcacctg aatcaggccc 360  
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<210> 5135  
<211> 447  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-C6

<400> 5135

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cttcataac tgtccagcta cctaattgtg cttgcagtgg ctttgagtat ggtagatcaa 180  
gttgcaaaac cacttgcccg tctgtcagg gtaagcttaa ctaccttttc cgtgttatat 240  
gagtgtggca ataattggaat gccaaactatt attaatata ttttgagcta aatttcttat 300  
gtgtattctg ttccttgaag gtatgggttc ttgatgctac tctgggcaaa gttcgttctg 360  
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<210> 5136  
<211> 415  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-C8

<400> 5136

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caatcgtcga atgctttggg atgccccggt tggaacccta atcgttcttc atcaacatcc 180  
tatctgtcac tatcggttga tccaaagtta tgcttctca gatgatgttt gctattcgta 240



gctctcattt tatggtgctt tgcattgctgt ttgtatagga taccaaaact ctgaaattat 300  
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<210> 5137  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-C9  
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 ttcacctaga tccttagaga gttatagtta tgctcgacgt gcttcaatta catcctctag 180  
 agcatggtgg tggatccttt tgcagaaaac agtgatcgct caggcttcac ttaaattatt 240  
 tagagagact cataggatca tgggtagatg cttaataata atatgcttgg tattcaagat 300  
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<210> 5138  
 <211> 401  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-D10  
 <400> 5138

gggtcgacgg gaacgcaata ttaccacaaa ttctccggtt gtggtaacat accgcacata 60  
 ttgcaataac ttagtttcgt tgcaataaat actaactttg ttgcaatata ggccctcatat 120  
 tgcaacaagc tgtatcggca tagcaatatg gtaccagtat tgcgacaaac aaattccggtt 180  
 gtgcgagggc cgtcatttcg ttgtaataga gactaggtat ttcaacagaa taactattcg 240  
 tggcaatatt cagaaagata ttgcaacatc gatgtgatgt tgcattagtt acaaattattg 300  
 ttgcaaaaaa gtggctaact atagcaacaa aatgcatagg cgttgcaata tgatagcgat 360  
 attgcaacca acaaattcca ttgcgcgaag catccgtttt g 401

<210> 5139  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-D5  
 <400> 5139

ggtaccagtc cagaattccc gggccgacgg ggaggttgag aagctgattg gcaggatagt 60  
 gaagtggctg aagccccgtg ggcataatattt catcagggag tcttgcttcc accagtctgg 120  
 ggattccaag aggaaagtga acccgacgca ctaccgggag ccaagggtttt acaccaaggt 180  
 gttaaaggaa tgccactcct atgaccaaga tgggaattcc ttgagcttt ctctggtaac 240  
 ttccaagtgc attggagctt atgtgaagag caagaagaac cagaaccaga tatgttggct 300  
 atgggagaag gtcaagtgc cagaagacaa aggctttcag agattcctgg acaatgtgca 360  
 gtacaaatcc actggaatcc tgcgttatga gcgcgtgttt ggggaggggtt atgtcagcac 420  
 cggg 424

<210> 5140  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-011-Q1-E1-D6  
 <400> 5140

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 ttttccacgg aaattttcaa aactcaaagt agtacatttt tgtttgccaa gttttagaaa 120  
 gtgggtagac cgaaatcagg gatcactcta ctacttctc tgttcacttt tataaggcct 180  
 tgtagacatt tcagacagca tgcaaagcag gtcagttggt tgaaacgaat tataaaaagt 240  
 aacgtagggg gcggtgactg tacatctctc agtggttgga aacatggaag agcggtagcg 300  
 gcaagcttta accataagta gccacactg aggctgatt tcccagcaca aaagttgctc 360  
 gcaacagaga actgggcggg atccanagac ggagcacatg atgaagagtg aacaaaactg 420  
 gcagcggaga gtgggaggag aggagaggag agg 453

<210> 5141  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-E10  
  
 <400> 5141

aattcccgcc cgcacggggc tcttcaagca cttgaacccg cttggatcac ggcgagacag 60  
 atggaagcag gacgaagagc aataacacga tatgcacgtc gtggtggaaa aatatgggta 120  
 cgtatatttc ccgacaaacc ggttacacta agaccactg aaacacgtat gggctcggga 180  
 aaggggtccc ccgaatattg ggtatccgtt gttaaactg gtcgtatact ttatgaaatg 240  
 gggggagtat ctgaaactgt agctagagca gctatctcca tagctgccag taaaatgccc 300  
 atacgaagtc aattttattcg attagagata tagaacccta aaaggggtat ggaagataaa 360  
 aaaaaaatg cccggttttt ctttctggaa agacaatatt tctttcatcc ttt 413

<210> 5142  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-011-Q1-E1-E5  
  
 <400> 5142

taccagtcta gaattcccgcc gtcgacggga tgatcagcga ggccgatgtc gatggcgacg 60  
 gccagatcaa ctacgaggag ttcgttaagg tcatgatggc caagtgatcc cgccgatgtc 120  
 ccggtggacg gtggtattat tattttaccg gggaggagga aattgtgcta tgcattattag 180  
 tagtaaggaa tgcggctctc gtttccttgt ctttgcccca aaccagaaga agcgtactag 240  
 tagacgtagt tgctgaagag cattcatgga atcctcctcc cctgctgcta ccttgtctct 300  
 ctcccggtg tcatgaaac atctttcttt ctgtgtggca aaaaaaaaaa anaaaaaaaaa 360  
 aaaaaaaaaa cggccgctct 380

<210> 5143  
 <211> 302  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-E6

<400> 5143

ggtaccagtc aggaattccc gggccgacgg gggattaatc aaataatata atttctaaca 60  
gttgggtctga aagttactct tcatagcaag tgccagaatt tttttccttt tctgttccca 120  
ccgggtgtga aactatcttg tagctgtaga tatattgatt atggaaggct gaagttcgca 180  
attgatgcaa gaaaaaaca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
aaaaaaaaaa aagaaacaca aaaagaataa gctaaaagat taactctaag gtaatcaaaa 300  
at 302

<210> 5144

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-011-Q1-E1-E7

<400> 5144

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tctctcagaa aaatcaccga cattctgccca ttataccatg gaggcctgga ggaagacaac 120  
catgtgttgc ttgattcttt tctgccttat ggctacatgt agtgaggttt catctaccga 180  
aaacatgtgc tatcacaacc attggaataa atgccatcct gatcaaaatg gaatgtgtcg 240  
agatagttgt gtgaaagatg gatgggatga tggacaatgc cggaacaggt ttaaaagact 300  
aaagggtgcc aagtgcgaat gttaccctaa gacttgtgat cattanggag gcaacatgcy 360  
actttcttct accaagttac tactatttat aaatttacat cggttttaat gattgacgtc 420  
aaacatgttg taacaccaat catggtga 448

<210> 5145

<211> 247

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-E8

<400> 5145

aattcccgagg tcgacctcag ctacaacgga caggcaggca ccttgtcaca ctgcgagaac 60  
 gccaatgccca cctatgttgg ctaccagcac ccagagccat gcatctagac gtacggccaa 120  
 ttgggtttcc tttttcctct tctaaagtta gcgttttcta aacgttttgt tggttcctgg 180  
 tgcttaaata taggacctg aaataattgg atttaattca aaataagtca attctaatac 240  
 acacgaa 247

<210> 5146  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F1  
 <400> 5146

gggtcgacgg gccggactgc gagaaagaat tcgagaatga gctggatttg cttggcagga 60  
 tcaggcaccc caacatagtg tccctcctgg gcttctgcgt ccatggtggc aatcactaca 120  
 ttgtttatga gtcctatggag aagggatcat tggagacaca actgcatggg ccttcacatg 180  
 gatcggccat gagctggcac gtccggatga agatcgcgct cgacacggcc aggggattag 240  
 agtatcttca tgagcactgc aatccatcgg tcatccatag ggatctgaaa tcgtctaata 300  
 tactcttggg ttcagacatc aatgctaaga ttgcagattt tggccttgct gtgacaagtg 360  
 ggaatcttga caaagggaac ctgaagatct ctgggaactt gggatatgta gctcctgagt 420  
 actta 425

<210> 5147  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F4  
 <400> 5147

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 gatgcggcta tagtcccat gtgtcgaggc acgacttaga ggcataaccg cattgaaagc 120  
 aatgtcgcaa gttaggcaat cttcacaaca tcccatgtaa tatagataat aaaaggggag 180  
 atacatagtt ggcttacact cgccacgtca atcaaagtac ataaatagca ttacaacatt 240

caaacactca tggcccgact atggcgccaa aatgaaagat aaacccaaca tgcgacacgg 300  
 tcccgatcac cccaactggg caccactact gatcatcagg gaaagacaca tagtaacggc 360  
 gtgagtcctc ctggaacttc cacttgagct caagggcgtc atctggaacg gaatcatcag 420  
 gccctgcatc tggtttgg 438

<210> 5148  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F5  
 <400> 5148

gtaccagtca agaattcccc ggccgacggg tgcgaccaat agtgatggta ttgaactacg 60  
 gtcacatcta tttaggaatg atgtaagata tttactatct gtcctcagtg catattttgc 120  
 atacataatt tttttgctaa actttcattg ctaagtgtat taattaagta ctatacggcg 180  
 ttcttcaaca ggactgccga tgacagttgt gcctcagggg atcgagacta aaggtcagat 240  
 gtcaattgtt agettacggc caagatatcc tgcattgcac atgaatgcat tcaggatttc 300  
 tagaagcgat gaatgcttaa tagtgaaaga ttggaggaaa attgttaatg atcgagaga 360  
 agtactacgg ggcagcaatg agaagcgcaa cccacgatta ggagacaggt tcactctgcat 420  
 gccccagtat gatcaat 437

<210> 5149  
 <211> 188  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F7  
 <400> 5149

ggtagcagtc tagaattccc gggtcgacgg ggctatctag ttataaaaaa aaaaaaaaaa 60  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa tacaacaaaa aaataacaac aagaaagaca 120  
 aaccggcgcc tcaaacgggt ccaagcctac ctactcatgc atgtaacgct ctaccgcctc 180  
 aaaaggggt 188

<210> 5150

<211> 375  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-F8  
  
 <400> 5150

aattccccggg ccgacggggg tcagaagaca actaaagagg gacaactcaa aggaacatac 60  
 gggttttctga gttgtggatg cataagttag tatgtcgaac aagttcaaca tatttcttcc 120  
 agataaccca tgctaaagag gaaggactgg cagattcaca atatagaatg gagaactcat 180  
 cgagagcact tttgttgtga tctttcggct caaaagaact tctgccaaga atggttcatg 240  
 gtatttggca gaatgaaata ccacggacct cgaggactat cgcaacagtt actaataacc 300  
 taaaggaact agcagatact accatcaaga agtacgtaga gtgaatctcg ggttcaaaaa 360  
 ccaatgagta gaata 375

<210> 5151  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-F9  
  
 <400> 5151

gtaccagtcc agaattcccc ggtcgacggg atatactgta tagctttgga tccaaagaga 60  
 gccagaaact ggatgcctcc tagctgctac agtgatgtta cctacatgct atctggagtg 120  
 taattcacag atatactgta tagctttgtc cgactagaag ctgaagtgta atgttaagta 180  
 tcgaatgact gaattagaga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggggcccc caaagggttt aaaccttaat 360  
 ttcccttgaa gggaaattta aacccctca aaaggggccc caaaattcaa ttcaagg 417

<210> 5152  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-G1

<400> 5152

gggtcgaccc tgatataaat actttggttg aatctgatcc tttctatggc tatgaatctg 60  
aaactgttgt ggcacatctt acaaaattaa atgatatagc taccctgttc actaatgatg 120  
agaaaactcg ctactattat atccttaa at ttttccatt ctcatataag ggtgatgcta 180  
agatattttt tgattctctt gatcctgggt gtgtgcgtag tcccaggat ttgatttatt 240  
atgtctctgc taaatatttc cctactcaga agaaacaagc tgetttaagg gacatatatg 300  
attttgtgca aattgaagaa gagagtctcc cacaatcttg ggggaggctt ctccaattac 360  
ttaatgcttt gcttgatcat cctctcaaga aaaatgaaat acttgatata ttttataatg 420  
gactaaccga tgc 433

<210> 5153

<211> 407

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-011-Q1-E1-G11

<400> 5153

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gacacgagtg attcaaagaa atagtctata atttgacata aagacattaa tactcaggca 120  
tcccacaaaa caatcctgcc tttcaaaata tcaatgctaa agatcgttat ccatacaaaa 180  
tcgtatagtt gtaacacccg gataattaag ctactgtaat cccctgttaa tgatgccagg 240  
tcacgcgttt tactgttgct agaaatcacg ttcatccaat atcagttcaa attcaaattt 300  
aaaaacaaag taaaaattta tagttttcaa aatgtcgaaa ctaaaaaatg caaaccatga 360  
caaataatcc agaggtaata atggtgaaga aaccagattt tttaata 407

<210> 5154

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-G4

<400> 5154

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gtagtttgtc atttgcctca atgcttcaact tatatcgttt tagagcatga cgggtggtttt 120  
 attttgaaga aatagatgaa ctcttggtgc tcaacttatat tattttgaga gtcttttagaa 180  
 cagcatggta attttctttg gttatgaaac tagtcctaata atgatgggca tccaagatgg 240  
 gtataataaaa aactttcata taaagtgcac tgaataactat gagaagtttg atacttgatg 300  
 attgttttga gatatgaaga tggatgatatt agagtcacgc tagttgagta gttgtgtatt 360  
 tgagaaatac tttgtgtaaa gttgtgtatt cccatagcat gcatgtatgg tgaaccatta 420  
 tgtgatgaa 429

<210> 5155  
 <211> 181  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-G7  
 <400> 5155

taccagtcta gaattcccggt gtcgacgggg ttagaaattg taaatatgca ttgttgtatc 60  
 gcgacctgaa tgaatgaaat aaacgaaata acgctcttgt tcaaccgtca ggctccgggt 120  
 cagtactgca ccaagctgtt attttttgcc tttttgaaaa gaagcacgtg tcgctgtgtt 180  
 t 181

<210> 5156  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-G8  
 <400> 5156

attcccgggc cgacgggagc acaaacagaa ctacaccgga cagggtgacg acttgatcta 60  
 ccactccaag gggcacgctc tgaaccagg gcaaaggagc tggacaaggc accagccttg 120  
 ggaaccaaag aaagaagagg ccacctgatc tgtatgaatg gtacctgata atcctcttct 180  
 atgtttcgca tttggtttgg tgtcgcggtc ctaaaaccgc cagtcacctt ggtttcatgg 240  
 actggacctg aataatgtac tctatctgat actgaatacc tgccactgaa caattttaat 300  
 ctctgtggat gtggcaattg agaaactggc gattcgggtc tcggtgtttg cattgaagag 360

tttctttttt ctactgatgt c

381

<210> 5157  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-H6  
  
<400> 5157

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aaccagagag tttgcaagcc catctccgtg agactgagat cccattggtg agatcaaact 120  
gattaggggtt tctggtagtg gctatgtcaa gtgaactcgg tggctccgga tagatcaaact 180  
tggtagggct gagtttgaca tttggtttgg gacatatgtg gatatgagaa agtgggttag 240  
ggctttggag catatcacta agcactttga gcaagcaagc cattaagaaa cacctcatcc 300  
ctttttaata gtattgactt tcctaaggac tcaatgtgat cttgaatcac taaaatgaaa 360  
acgtagagtc ttgagctttt gagcttttgc caatcctttg ttcttagcat cttgtaaggg 420  
ttccacatcc tcttgt 436

<210> 5158  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-H7  
  
<400> 5158

gtaccagtct ggaattcccc ggccgacggg ttgctcaagc actctgacaa ggagagcctt 60  
gcgagaaaga acaaatcagg attcaatgcc ctgcacatca ctgcaaagga aggccacgga 120  
gaccctactt gtgccattgt gtgttcctcc acttctggcc tcctccatta ccagtgacta 180  
acactacaat aaatatgcaa ataattagtt ttgctacact atagtagcaa caatccttgc 240  
gtgacaatta ttgtaccgat tacatcatag caaatcatag caaagggaca atatgagggg 300  
ccttcaaact gcagtttgag agacaatctg tttgtcctat ggaggtgctc aatggactta 360  
acatcagaat agcctggctt tcagaagaaa agatgacagc tttattttgt tgttgtagtg 420  
tgcctattcg gaaac 435

<210> 5159  
 <211> 371  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-H9

<400> 5159

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 aaaaaaaaaat aaattcagaa aaaaataaaa atacagaaga agaaaaaatt taaaaaaaga 120  
 aataaatgag aaaaaataaa aaaatataaa taaaaaaaat agggggcccc cagaggttta 180  
 aattttattt tgtctttctt gcaactttaa gacccttaat cgttttcctt aaaatataat 240  
 ccttggggtg tttttttaaa acttctaaag gggaaaaccc ctggttttac ccaatttaac 300  
 cccttttgaa aaaaccccggt tttcactaat gtggttttgt ctgaatgggc ccacatttta 360  
 ccccttcca a 371

<210> 5160  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-C5

<400> 5160

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 tttgtttctg gaagaatgat aacgaacaat gcactaattg cttttgagtg cattcattat 120  
 atcaagcaag aaaaagatcc aacaaaaagc ttatgtgcat aaaaactaga cctgtcaaaa 180  
 gcatatgatc gggtagacta gaacttcttg aggcaagtga tgcaaaagct ggggttttga 240  
 tcatcgatgg attgactgga ttatgacttg tgtcacatcg gtgagatgtt cggtaagatt 300  
 taatggaacc ctcttggaatt catttgacc gtcgtgtggc ctacggcaag gtgatccact 360  
 cteccctttc gtgtttctgt ttgttgctga cgggctttct caatcctacg acaacgtgtg 420  
 gatgt 425

<210> 5161  
 <211> 114

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-D10  
  
 <400> 5161  
  
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 cgaacccttg catgcaactt acttgccctc caaaattctc gcttagattc agtt 114

<210> 5162  
 <211> 345  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-D5  
  
 <400> 5162  
  
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 taacttgga cgcgggtgct tcaaagtgct aacaagactt ggaactccag caaaggaaga 120  
 ttgtacatat gtgactttgt ttaggcagtg tagggagggtg ctaggcacaa ggtttattct 180  
 gtgcgacca gtgtatctat gttgatatgt taggggtgtgc ttatccacac tgcactagtt 240  
 ggtagccgtg tgcaaaatat gtatagtacc agtgggttgg cttgtatgtg tgatacatgt 300  
 gtgtatcttg actgcttggt aatgtaatgg cttgggttgc tgctt 345

<210> 5163  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-E5  
  
 <400> 5163  
  
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 cgattctgca tcaattttct cactgcatct tggctgtaaa cggactgtag catcgattgt 120  
 tggagagaca ggatcttcaa agaactcctt tgctgaaact gtaattatgc agtcactctc 180  
 agcactcgaa ctatccactt tgataaaagc tccagattct tgctaatct gtttgataat 240  
 accacctctt tttccaatta cacctccgac attcgccgca gcacaaagca gacgcaggct 300

aaactctttt gcagagctca cctccctccg ttgttggtat atagaaggcc aatctcccac 360  
catatcacct ttgtatcgtc cataaggact aaccatagga gtaatcccta caactgggtgc 420  
agtagaggaa ctnacaaggc gggatcc 447

<210> 5164  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-E6  
<400> 5164

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aaccgaccat gcacgccgat cagctattac cggcgggtcg cgccgcgggtg gccatggctt 120  
gcctgctcat cgccggcccg gccgacggcc tcgaggagta cgcccccttct gccgcgggtga 180  
gcctggagat tgagccgctg tccatgaacc agaaccccg gtagttcctc ccgcgaccgg 240  
aggtgatgtc gctgccgacc gatctgctct caaggccaga cgtgggtggc gacggtgagg 300  
ggtagtccc gcatgtggag gttgtgccag aggtggtgct gcagcccga gacccccctcg 360  
ccgaggctct cggcgggtggc tcgtatgcat aggagccatc gacagagccg gtcacgctca 420  
t 421

<210> 5165  
<211> 412  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-F5  
<400> 5165

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gactgactac aatggtaggt tgcgtacgtc cttatacat cactactagg tgcttatggt 120  
acttcgttct gtccggttat tagcactcat gtttactttc gcactgagaa ctgaaaaact 180  
gaatgtaa attagtatgga tgccgtgtat gtggaccttg tgttgtaatt ccgtttaaag 240  
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaggaa aaaaagaaaa aaaaataacc aacacataaa ggggtctccc aataggttca 360

aagcttttagt ccacggacgg gcaacttcat accgctgcta ggatgtaacc aa 412

<210> 5166  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-F7  
 <400> 5166

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 ttttgattt gcggatattt ccaaactgag attgcaatgt ttogagccag gacgccgaga 120  
 cggttgaatt catcctcatt ccttccgtgg gacctaaca tgcacccaa ggacacatgt 180  
 acatttttct agccattttg gtgcactaaa gcatgtattt gtagtttgta tttgaattat 240  
 ggacattcct ataaaactcg gctaataaaa caataaggtc aaatgaaccc tgaataattt 300  
 caaagttcag cgtgaatctc ctgttgctcc atgttacgtg tagaagaaaa tacaaggcta 360  
 aaagagggag cgattatcct ttcaccaca aggggacacg tttccctatc gaaaccacga 420  
 cggttcttgt gacaaggctc cggttt 446

<210> 5167  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-G1  
 <400> 5167

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 aaagtaatgt gccaaaggtt gccttttagga tgtttaacgat gcttggttggg ttgtgtggtg 120  
 caggacagaa actttggctg tagtgcgca ttttacatgt tttactggaa tgtcaaacgg 180  
 ttctgattct ttttgactg tctttccata caaattgttt atttttccaa attttggcag 240  
 aattttcaag taacataagt atggttaatg ttcagattgt tacagactgt tctgttttag 300  
 acagattctg ttattgatgc atagtttgct tgttttgatg aaactatcaa tttatatcag 360  
 tgtattaagc catgaaaaat ttatactaca gtagacatga tgcaaaaaca aaatatgaat 420  
 tggtttgcaa cagtacttag ag 442

<210> 5168  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-G5

<400> 5168

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ggtaccgatc tagaattccc gggtcgacgg gaccttggga tccgggtgga tccattactt   60
gagcactata tgcttagctt aatggcttta aagaaagcgc tgccagggag acaacccgga  120
agtttttagag agtcatttat ttctgttggtg tgcttttgta aagtttaaaa acaataataa  180
cgtgccaaagg tttgccttta ggatgttttag attgcttggtt ggtttgtgcg gtgcggaaac  240
agaaactttg gctgtagtgc gtgattttac attttttact gaaacgtcaa acggttttaa  300
atttctttgc actgtcttta tatacaaatt gtttatcttt cctaattggt tcataatttt  360
tggagtagca gaagtatggt gaatgttttag attactatag actgtcctgt ttaagacaga  420
ttctgttttt aatgcatagt ttgc                                           444
  
```

<210> 5169  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-G7

<400> 5169

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ggtaccgatc tggaattccc gggtcgacgg gaaccatcca aggatttgaa gcacctaaac   60
ctgaagttat ttataatggt tgggttcgag gatgaagaca aggtgacaaa ctatataagg  120
cttgatcatg aacgtgccgt gggcttgaaa agaatcgagt tgcattgtag aagcccatgc  180
aatgggtgcg atgccatcga ccttgagtcc ctgagaagat cccaggcgga tgaagctagc  240
aggcatcgga ttaaggagca actcagacat ggatcttcct cgtccgtgga gatagtaatc  300
tgctgatgga tatggtgaag gaatgataaa tttcataaag ctgctcgagc gatgactgta  360
cgaagtgcag gcagtcgtaa ttttaagttc agttattgat agtctggatg aatgttttgt  420
ttttgtccaa tttacggagt aatta                                           445
  
```

<210> 5170  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-H3

<400> 5170

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ccggtcaaga aatcccgggt cgacgggaag gtcacacaga atatggccct caagctaagg 60
aacaccgaca ctggcgagct catcatgcac ctggagtggg ttaacctccc cccaggcatg 120
tcgcggtgat ttgatttgat ttgcagaggg aggccagcta ttgtctgcct tttgtgatcg 180
taatgttgct tcctctatat atgagctatg aaaataatta agcgatgcct atctcattct 240
ttacataaca cccaccgtaa tgatttgtgg atctcaccag gatggtgcgt atataatatg 300
agcaacgtcg tggtagatc cgcagatcat cacagtgggt gctacgtaag gcatgtgata 360
gacttatgct gctgggggta atgcttgctt tcagttttgg ttctgcatat gttgtatggc 420
tattttaata caaaaaggta ttttt 445
```

<210> 5171  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-H5

<400> 5171

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ggtaccgatn cagaattccc gggccgacgg ggtataagcc atggaaaagt tataatacag 60
tagctacagt gcaaaaacag aatatgaatg ggtttgcaac aatacttaga gtagtgattt 120
gcattattat actaacggat cttaccgtgc tttctgttga gttttgtgtg gatgaagtga 180
tcaaggatcg aggaggtctc gatatgagga gaaggaggag aggcaagagc tcaagcttgg 240
ggatgcccaa ggcaccccaa gtaaatatc aaggagactc aagcgtctaa gcttggggat 300
gccgcggaag gcatcccatc tttcgtcaag aagtatcgat atgttttctg cttcgtttcg 360
ttcatgtgat atgtgtaa atctggagcat cttttgtgct taattttcat ttttccttta 420
tgcaacatga tggatatgag 439
```

<210> 5172



<211> 440  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-H7  
  
 <400> 5172  
  
 ggtaccgatc tagaattccc gggccgacgg gggggagggtc atatgtacaa taattgtgcc 60  
 caaggaggac gcgaaggaaa gggctgaaca gttttcgaag ccagcactaa ccttagaaga 120  
 attgacaagt tgggtcaaaag ataaacttgc tccatacaag attccgacga gattgcacgt 180  
 atgggactct cttcctcgga atgccatggg aaagggttaac aagaaggagc ttaagaaatt 240  
 attagagggtg tagccatatt tacattgatg tacctatttt tcaatcgcac ctttctgcga 300  
 ggcagacata tagtgggtgtc agctaataat tttgttctgt tcgacaataa tgataattta 360  
 gagcaactat agtaaattgtg caagtaaata atgcacacta tcctatgata tcttaaaagc 420  
 gagaatgtga aataactaga 440

<210> 5173  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-A1  
  
 <400> 5173  
  
 taccgggtcca gaattcccgg gtcgacgggc tcttattaag gattatgttg atgggttgca 60  
 ttttaccgtt gcacatgatg attttgatga atgtaatatg catgttcttg ctgctcctac 120  
 ttgcaattat tatgagagag gaactacatc tccacctctc tatgtttcca acacgatgaa 180  
 attgcaagaa actgcttatg ctatgtactg gccattactt gatgogcagc aattgttctt 240  
 gtatgacatg ctgatgcata ggaagagagt tagacttcgt cattgcttga tataatgttg 300  
 tttgtgctca ctactaaatg ccaaatacatt gtttaattaaa attggctttg atataccttg 360  
 ggatccgggt ggatccatta cttgagcatt ttatgcctag cttaatggct ttaaagaagt 420  
 gctgcccaagg gagacaaccc g 441

<210> 5174  
 <211> 375  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-013-Q1-E1-A10

<400>       5174

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attcacgggt cgacggcgggt cttcagcgag gtctcgaggc ataaactcct caagaacatc   60
aaaaagggtgg gccccgaac cggaaccggc ccaaaccaat tcgccaccgc caacggcggc  120
aacctcaaaa ttccgtcggc ccgccggtcg cctgtcatcg tcgccccgtg tcccgtgtcg  180
tcgatctaaa taagagagtc gtgtgtcgtg tcgtgtcatc cccatgtccg tccgatgaga  240
tctccgtggt tgggttagga gggtttagg tggactcttt tggccgctgg atctgtgtcc  300
ggcggccatg gttatcttcc tgtgtctgct gctatcttac tgtttgaatg agatgaactc  360
cgctatgaat tatcc                                     375
```

<210>       5175

<211>       434

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-013-Q1-E1-A12

<400>       5175

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ccaaattgtt atggtgctgc tagaaggang gcgcgagaag gccggccggg ggccttttgc  120
ccatggccgg gcaagatgga agggatttcc ttcttaattc ttgcttgatt agattgatac  180
atctcctctc tttatataga gaggtttact tgactcccaa gcaaggctta cttgatccct  240
aagaaagcga cccttatctc taattaacct taagactaac gggctatacc gccagcccag  300
gccattaggc ccattacgta ctctaacaca gtcataagat tgtaactagt aagattttta  360
aaacatcaaa actactgttc tttgtagttg ttaaaaacac gacatccttc aagttcatta  420
acaatatatg acaa                                     434
```

<210>       5176

<211>       454

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-013-Q1-E1-A2

<400> 5176

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gacgagggca agggcccgat ctccctcatg ttcccaatct tcagcgcggc aaccatcgac 120  
cagatcttca ccacctcaga tacactgtct ctcccccatg ggcccgctca tgcattggtga 180  
agaccccttg ctccgaggtg gtgccgtggt caagaggaga agcacagaat atggatggag 240  
gatggggaat acatgcagaa ggcggaagct ccatgctcag ctcatctctc aactacactg 300  
ctctaagact acttgggtgag aatgtcgatg atgagcaaga tatgtccgtg ccaaaaacaa 360  
ggaaatggat acatgaccat ggtgggtgcaa tgatgataaa actggaagca agatgcttgg 420  
atTTTTTgac aggtcaggtg taaaccctac cccc 454

<210> 5177

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-A3

<400> 5177

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agcagtcata ggaaactata cttacacgtt gacagttaca agaacctaca tacatgttgc 120  
ttcaccacgc ttgatgttgc tcttgtgtat tgctgctgct gcccatcttt tttctcatcc 180  
cacacatgca cgcaactggat gttatgcac ttatcgctt ggctatcgca atcctgaatt 240  
ctgcagtaaa taacttaaaa aagattcatc acaagcggcc tgctcaacag gatcctagct 300  
tacgtatgct tgcattcgac gtcatacttc ttctagattg tcacottaat tcaatt 356

<210> 5178

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-A4

<400> 5178

taccggtcca gcattcccgg gtcgacggga ctgttcagtt tttgacagat tctgttttca 60  
ttgtgttgat tgcttatttt gatgaatcta tggctactga aatagtttat gatccataga 120

taagttggaa tacaataggt ttaataccaa tacaataaaa taatgagttc attacagtac 180  
 cttgaagtgg tcttttcttt tcttccgcta atggagctta cgagttttct gttgagtttt 240  
 gtgttggtga gttttcaagt tttgggtaaa gattctatgg actatggaat gaggagtgga 300  
 aaagagccta atcttgggga taccoaatgc accccaaggt aatattcaag gacaaccaag 360  
 agcctaattct tggggatgcc ccggaaggca tcccctcctt cgtcct 406

<210> 5179  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-A5  
 <400> 5179

tacgggtccag aattcccggg tcgacgggat gcagaaaagg acacatgcgg gctgagagga 60  
 tttgaagtaa tttccaaaat ctcacccgtg ggtatttata tccctaccct gtcgggtgtga 120  
 ccgagtggaa caactcagtg gcaccgagat tgcagaatcg caagcggttg ctccaactca 180  
 gtgtgaccga agtgttcaaa tcggttgac cgagatgaaa acctagatca acttagtgaa 240  
 ctcggtttga acgaaatgga tgtctcggtc agaccgaaat gcacaaagag gttttggaag 300  
 ttttaagtcta tgaagaatca gggactccga gtgctcctca cacagagtgg ttcgaatctg 360  
 acttgatcaa actttgtgat gtagcatgaa tagagtttga gacgagaaaa gcatagat 418

<210> 5180  
 <211> 295  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-A6  
 <400> 5180

gtaccgggtcc agaattcccg ggtcgacggg ggggttcaac gcggtgccgt acgtggtggc 60  
 gctcttcagc tgcattgctg ggatcttcta cgcgctggtc aagaccaact ccagcccgtc 120  
 gctcaccatc aacgccttcg gctgcgtcgt cgagggcttc tacatcctgc tctacgtggt 180  
 gtacgcgccc aaggccgcca agcaacgcgc cctcgcttc ctccttctcc tccaagttgc 240  
 cgcctttgcc ctcaatggct ccgttaacgt tctcctcgtg cccaaccca accgc 295

<210> 5181  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-A7  
  
 <400> 5181

taccggtcca gaattcacgg gtcgacatat ctaagacaaa gaagatcgcc ctaaggacat 60  
 tgatcgacca ctctgtcgtg gaaagttttg gtgccggcgg caagacgtgc atcctcacga 120  
 ggggtctacc gaggaatgcc gtcggggaca atgcacacct gtctgtcgtc aacaatggcg 180  
 agtcggacat caagctcacc aacctgcgtg catgggagat gaagaccccc acgatgaaca 240  
 agcgtctggg gcagtagcaa cagcccggcc cggtagatcg aggattcaga gtagcctaga 300  
 ctagccatag ctagctagct tgttgattta gttgagatta attaggagag gtccaggttt 360  
 agtgatgagt tgttagaaag gaccggaaat gatccatttt gtttcagaac cttttccaaa 420  
 tggc 424

<210> 5182  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-A8  
  
 <400> 5182

gccggcagta ccggtccaga attccccgggt cgacggggca ataagcacat aacacaagcg 60  
 aagaaaaagt gaagactttc tatcaacaac tattataatg atgcctttga tgtagaatat 120  
 cactgcagtt acatttgaac aaatgaaatc cctttttaac agatgagttt tcgtccgaaa 180  
 ccctgatact tccaaagaga ttgtctgttt tgtatccagt ttttgtcata accctttcaa 240  
 ctttttagca catgctatat gggttaaatg atgatccat gccaaactttc aaccttttca 300  
 gagttcattt gtattgcttt tcaattaaag ggtcattgag ctcaaataat gaactaatac 360  
 caaaaagaat gaactaatag caaaaagaat gaagtgaaag ccaaaaagaat gaactaatag 420  
 caaaaacaaa gaactaa 437

<210> 5183  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-B1  
  
 <400> 5183

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gatgcacttg atgatgatct cgttatgcct attgcttgtt gtgatgatta tgattgggaa  120
gataatgata cttcttatga tcttgaaaat ctttttggca cttgcttgga atatgacaat  180
tgctatacta ttggtgctat ccatactact aatgatgaga gtgattatgc ttatgatatg  240
aaaaggccca agcttgggga tgctatgttt gaagaatatg atatttttga gaatatattt  300
gctgcaatta atgtttgtcc caagcttggg gatgctacgt ttaatgaaga tgatattttt  360
agcccccccc cccaaagttt tgatatgcaa agttgttatg atgatag                    407
  
```

<210> 5184  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-B10  
  
 <400> 5184

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ttacacaatt atttagatac tcattgatct tcaattatat cttttggagt agtttgtcgt  120
ttgctctagt gcttcactta tatcttttta gagcacgacg gtgggttttat tttgtagaaa  180
ttattgaact ctcatgcttc aattatatta ttttgagagt cctaaaaagc atggtaattt  240
gaatgaaaac tatcatagga ggtgaattgg atgccatgat caatttgata cttgataatt  300
gttttgagat atggaggtag tgatattaaa gtcatgctag ttgggtgatt atgaatttaa  360
agaatgcttg tgtttaagtt agcaagtcnc gtagcatgca cg                        402
  
```

<210> 5185  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-B12

<400> 5185

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agcattctaa acgacgtcac caattttccaa catgtttctga catcatttgt tgtttttcag 120  
tcattttacct aattgttttag agagctaaat gaccatgaaa ttgaaaatca ctagaaaatg 180  
aactgtgaaa atgttgaaac ttggcatggg atcatcattt caccgcata gcatgtgcga 240  
aagagtagag agggtcacgg caaaaactgg acgcacttcg tgtacaaact ggacaatctc 300  
attcggagta tcagggtttc ggacgagaac tcattctatta cacgggcact ttaatgtttt 360  
ttaaacttat ttgaactcgg g 381

<210> 5186

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-B3

<400> 5186

ggtaccgggc cagaattccc gggtcgacgg ggagcacaag aaggacggcg agcacaagga 60  
gggcaggaag gacaacatcg gcgacaagat cagcggcgac ggccacagcg acggcaacag 120  
cgacggcgac cacaaggaga acagcgacca gaagaagaag aaggacaaga agcacagcga 180  
gggccacaag gacgacgacg gccacggcaa caacaacagc gacagcgaca gcgactgagc 240  
cagctccggc cagcaccgg cagcagcgtg cattctatgc aagatagatg aacgcttggg 300  
agaagtgtgg catacatata tcttgcattg tttggaccgt gtggtaccaa atgttcgtaa 360  
tgcgtagacat gtcgcatgga tcctgtg 387

<210> 5187

<211> 83

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-B4

<400> 5187

taccggtcca gaattcccgg gtcgacgggg agcacaacac ggagtggcag caccacgatg 60

gcaagaatga tagcatgaac gac

83

<210> 5188  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-B6  
  
<400> 5188

gtaccggtcc agaattcccg ggtcgacggg cgttgccaac ttgattgagc tcttggtgat 60  
catctcattg tcattggcct ctatcatcac caaagctctt acttcttctt gtttttgctt 120  
ttccctcttc ctcttctttg gtgcctcatg tgcagcccta catcgagcct ttgtttctgg 180  
tgtggcttgc atacaacttt ttattgcccc ttgatacca gctatgtgtt gcttcactct 240  
agtcacccca cctgacatct cctttccaca aagaatgcac ttgaatcttt gcagatcatc 300  
tggatcaatc agcacaacaa attcccaagc catgtcatct gattttctct taagtttggg 360  
acttgcaacc tctgaagtac cagaatcagg catctacaaa aatcacaagg gcaatagcat 420  
gtattatagt attagtatta gacggt 446

<210> 5189  
<211> 150  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-C1  
  
<400> 5189

gtaccggtcc agaattcccg ggtcgacggg catcaaaaaa aaaaaaaaaa aaaaaaaaaa 60  
aaaaaaaaaa gaaaaacaaa aagataaaaa aaaaaataa acaagaatga aaaagtcata 120  
actcatcaaa aaagtcacct aaattcaatt 150

<210> 5190  
<211> 409  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-C10  
  
<400> 5190



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aggctgcttt ggagaacggc tggctgctgt gcatgaatct ggacaagctg gtccaatccg 120  
tcgtctgaaa attagcgcag catgtcggtc ctgaataaat tctgctgctt tcgtcattg 180  
atgaacagat tggggttgtt tcttgcttgc ttggaagatc gagagtgaac aacatatcct 240  
atgttgtaag ttgcaactgt atctcatgcc aactcaataa tgagtgggac cgaaaaaaat 300  
catgatggag caattcaaaa ggtcaagtag gatgtcataa ttgtcatcga aggatgtttg 360  
gacctcaaaa aaatcggtcg cttcaaaagt atcaaactta agttccctt 409

<210> 5191

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-C11

<400> 5191

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atgttttgca tctgtagtcc tcgtagacgc gggcgacatc taacttgatc ttggattttg 120  
cgtattgctt caatacagtt ccggtacaca aaaatacgtg atcaataaag ccctcctggc 180  
tctacatgtt acatatgtat ggccaatctc ccgtatgaca cattagcaca ggcccacgtc 240  
agcctgagac ccatatgtca gtgggagcga gaaataagat aatgataagc aaaaatgggt 300  
gacgcaaagt ttcgaacca caatccccag ccaaaatttg cgtgagcaag ccaccacact 360  
atgggccaaa ttcgggtaaa atcaggatga acattcctgt atataaataa cgctg 415

<210> 5192

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-C12

<400> 5192

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gtcgggtaag tcgcaggtat ggccaccggg taatcggttc agatctcgcg ctcttgtttt 120  
cgctgttctt cgtttggttg taattccagg cgagcgttct gtttgggttg tgctgctcct 180

tattacgttg atgtcgatcg aggcctagtt ccggtgggtt gtcctcctct gttccgttga 240  
 tggttggtatt gtcttctgaa cctcgctgct ttggtttagg tcgcggctaa tctattttgc 300  
 tttgacttct gatctgattg ggtcctggct aatccatcat gctctgattg cgatatgttt 360  
 tagggtcgtg gcttatccat ttttatacta attgctgatt tga 403

<210> 5193  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-C3  
 <400> 5193

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 tatgtgcaag ggcattgatat tcgtgaacgg cgaaggcatg ggtcgctact ggacgtcatt 120  
 cataactcct ggcaaagtcg cttcccaggc agtgtaccat attccacgga catttttgaa 180  
 atccaagaac aacctattgg ttgtatttga ggaggagctt ggcaagccgg aaggcatact 240  
 catccagaca gtgaggagag atgacatctg cgtgttcacg tcggagcaca accctgcaca 300  
 gataaagcca tgggacgagc atggaggcca gatcaagctc atagccgaag accacaacac 360  
 tcggggattc ttgaactgcc ccccgaagaa gaccatccag gaggtagtct tttgcaacct 420  
 tcggaaacct ggtgggggtca tgcggcaac 449

<210> 5194  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-C5  
 <400> 5194

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 tacaactcca tcatgaagtg cgacgtggat attaggaagg atctgtacgg caacattggt 180  
 ctcaagtgtg gtaccactat gttcactgga atcgctgata cgatgagcaa ggagatcact 240  
 gccttggtc ctagcagcat gaagattaaa gttgttgctc ctctgaaag gaagtgcagt 300

gtctggatcg gaggatccat cttggcatct ctcagcacct tccagcagat gtggattgcg 360  
aaggctgaat acgacgagtc tggcccatcc atcgtgcaca ggaaa 405

<210> 5195  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-C6  
  
<400> 5195

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ctcactctat ggcctgaaat aacctccccg agcctggtag cagcggtttg ccgacttcca 120  
caccaccatt ggtttcatct tcacatgttc gattcgtcgt tgtttgccct ctgccatgac 180  
actgacatga gctacctttt cttctatctc ctccgacacc atgtttcacc gcatgatcag 240  
ctctttccac taggcgctac attacatccc agatgttgag gtccgagaca cctccaatgg 300  
cttcttcctg tagcatgcca agtatgtcag ccggtactt gatcgagggt gcatggccag 360  
tttccagcca tcacatccct ggtagacacc cactccaagg tctctgccac caccggctca 420  
gctgctgctg atgcaagctt ctactggact a 451

<210> 5196  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-C9  
  
<400> 5196

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aagatatgta tcaaggccag tgttcctgaa atcagtgccca ttgtcacttc taagggtgctt 120  
tatcttggcg ccatagttgt tcattgctcg attggcgaag cgtctgaaga catcctacac 180  
ttcagtcttg tagaggatta tgtgcactca agtatatcta gaataatcat caacaataac 240  
aaagccatag aggcaagcag tagtagtaag agttgagtaa tgagtgggac cgaaaagatc 300  
catgtggagc agttcgaagg gtcgagtggg tgtcatgatt gtcttcgagg gatgtttggc 360  
cctcgtcatc ttccctgctt cacaggcacc gcata 395

<210> 5197  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-D11  
  
 <400> 5197

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 ggggcgttta ccgggggagg cgatgttcgt gctggcgag gcgagaggaa gatctccagc 120  
 ctaccggcgt acctcgccac ggccgtggag ggctgccaca tcacgggcga catcgtgcgg 180  
 cgcttcgcgg agatggagct ctgccgctg ctccgttggc tgctgggctt cagaggggtcc 240  
 agggagcgcc tcctcaccga cgacctcttc atcgccaagc tcgcatgga gatgggcgtc 300  
 agcatgatcg ccaagaccgc tgccgagtac gagaagagac gggagaactt cgtcaaagaa 360  
 attgacatcg tcatogetga tgtgggtggg gtcgtcattc aagggatgga cctttccctc 420  
 aaggaaggg ccttgt 436

<210> 5198  
 <211> 258  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-D2  
  
 <400> 5198

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 ctgccaggt tgcgctgtga aactgacaa ggggctaata agacagaatg tcgtggccat 120  
 gattatttct caccaccatt gttgcggtgg cagccacaat gcaagctgag accgctctga 180  
 ctacggagga gagctcattg aagactgcga ccccatcagg atacgtgttg acgccaccgt 240  
 agcagctaca cgtgttgt 258

<210> 5199  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-D3

<400> 5199

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cggatgccgc cgccggcaac gcggacgcta aggccgagaa gccccacaag aaggcgtccg 180  
gcaagcaciaa gctccgcagc gactagaagc agtgcgcggtg agcgcgtcac tgccacaccg 240  
cgtacgtacg taactacgag ctgtcgcccc gccacacctt ccggcgacgc acgtaggcct 300  
ccatccagca gcgtctccat caaattgatt aattgcgctt tgaattactc ttcttcttcc 360  
tcgcggtact ctcttccttg attgtagaag gaacgagtga cgtactacca tacttcggct 420  
agttacttaa agccttggtt aattttttcc t 451

<210> 5200

<211> 324

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-D4

<400> 5200

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ctcttgcgac gtgggttttt gcaacagtcc ggaacgctgc acagtgagat gttcctttga 120  
gttttgtgtg tcttgcgtga gttatgcatt gtgttatctc gaatagctgc cgtgctggca 180  
tttggatcat aatcttaatc cgttcgtctg acacaaataa attcaatcac agaataaata 240  
aatgcggacg atctatagga tcgaagctta cgtacgcgag catgctaggt cataactctt 300  
ctacagtgtc acctaatttc aatt 324

<210> 5201

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-D6

<400> 5201

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tccatcccgg aggcgcagct gaactaccg gcgatactgg tgccactctc caagaagccg 120

ttcaaggcaa agcggacggt gacaaacgta gggccggcga agtcgatgta cactgctcac 180  
ctggacgtgc ccaattggct caaggtgaag gtgcagccag aggcgctgga gttcacgtcg 240  
gcgatggaga agaagacatt cacggtgacc gtgagcagca ggggaggtga cgccgacgcc 300  
aacgccgggc agctggtcga ggggagccta cgctgggtgt ctgaagatca cgtgggtgcgg 360  
agccccgatca tcgccgacgc cagggttgtc ccgacatgat tctgtcaggc gctccctgga 420  
catgcttctc tcgcaagccg catc 444

<210> 5202  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-013-Q1-E1-D7  
<400> 5202

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gacgatcggtt gcgacggcca caacgaagtg catctctcaa ttccaggatc aacatgctgg 120  
acgaatcctc ctttcatgtt aagttgcaac agtgcaagca aacaccatgg aggcttctgt 180  
agttagggac ggtgaatctg catcaacagt gctggatgga aattgctcgc cgtccttcct 240  
ccataaacca cgtagggacc ttgtattagc ctccccatct atccgtcagg aagccctgac 300  
tttccctgct attgctgtca aaaatgctac cttgttagca cacgaactga acttaagtat 360  
gtcacatgga gcttcaggta acaaactctaa aagaacccaaa attaagtat ggcatgtcnt 420  
tcgcc 425

<210> 5203  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-013-Q1-E1-E1  
<400> 5203

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gagtgtgtgt ccgaggtaac actggtcttc ttcttcttct tccctcacac ggtcccagcg 120

gcaggagcaa gtgccctatc ggtggcagct gctgcacctg cttgcaggta caattgggtcc 180  
 tcgcaaatca tcggatcttt cttatcggac gggatggtga tgatcatcac aggtcgtggc 240  
 atcttcaggg tagttgtaag cgtagtgtga cgccgccatg aacttgacca acgtacgca 300  
 gcgatcgatg tcgttgtagg gcaaagcgat cctggaaaca tcgtacacga ttctcttcgt 360  
 cctgtagttt agatcgcttt caaaagtcac gggtagcgta accttt 406

<210> 5204

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-E2

<400> 5204

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 gcgctttcct atttggggtc gagagtggca ctgatggtga aggtaccacc agtgccgtcc 120  
 tccttggcgg acaccttctt ggtctctggc ggagctgcc a ttgtcttctt acacttgccg 180  
 gtggagctcg atggtgcgtc ctgcacggca gcgcagcact ccgaagaggt gcacttgccg 240  
 gagtgggcat cagaactctt gccggacttg gtcttcttct tcccccggg agcttcaacg 300  
 gcaggtgact tgogatctgt tgcggctgtc gtttcccggt agatcttgtc agcgcagata 360  
 agagcatcct tcttgtcgcc agggacagag atgacgctta tcgggcttgg aatcttcagc 420  
 atgttgatg tgtagtgaga ggctgccatg aaactggtga gt 462

<210> 5205

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-E3

<400> 5205

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 ggacaccttc ttggtctctg gcggagctgc cattgtcttc ttacacttgc cggaggagct 180  
 cgatggtgcg tcctcgacgg cagcgcagca ctccgaatag gtgcacttgc cggagtgggc 240

atcagaactc ttgccggact tgggtcttctt cttccccccg ggagcttcaa cggcaggtga 300  
 cttgcatct gttgccgctg tcgtttcccg gtagatcttg tcagcgcaga tcagagcatc 360  
 cttcctgtcg cctctgacag ag 382

<210> 5206  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-E8  
 <400> 5206

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 cttggctgac aataagcttg aagcgaacga caacaagggg tgggaattca tcacttcttt 120  
 ggccaactgc agccaactgc agaaattgat actcagcaac aattcttttg gaggacaact 180  
 accaggttca attgtaaacc tctcgacaac tctccaacag ttatacttag atgacactag 240  
 gatctctggg agtatacccg cagatattgg caatctgggt ggtctcaacg tgggtgtaat 300  
 agcaaatact tccatatacag gagtgattcc ggatagcatt ggtaagctag agaacttgat 360  
 tgagctgggc ttgtacaata atacgttgtc tggcctcgta ccgtcatctc tgggaaaatc 420  
 ttcacaattg aataagtttt atgcatacaa caacaac 457

<210> 5207  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-F1  
 <400> 5207

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 accatgagag ctctctctt cctcatgttc gcttggggga tcgtaggcca caaagttggg 120  
 catctagctt gtgggagaga gacgcatcca tgacagcttc taaaaaggtg ggagaagcga 180  
 ggattctaga ggagggatct aatgaagaag agagatagga gcagagacca ctgcacctta 240  
 tagcactggt gacggcgata gcttgcaaca tcaatggcca caactttgag agttgtgggg 300



gagcaaccga gaggggttcg atgttcgatt tggacagtcg cagtcggatc agagagcggc 360  
 ggaaggaagg ggagcgagcg agcagaagca aaagaggcng anggggagat ggggttcgatg 420  
 gcgcccgtta aggetggcct ccttcttcgc ggg 453

<210> 5208  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-F10  
 <400> 5208

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 tatagttttt gctctagtgc ttcacttata tcttttagag cacggtgggtg gatttgtttt 120  
 atagaaacta ttgttctctc atgcttcact tatattatct tgagagtctt aaacagcatg 180  
 gtaatttact taatcctaata atgctaggta ttcaagacta gtaaaaaactt tcttatgagt 240  
 gtgttgaata ctaagagaag tttgatgctt gatgattgtt ttgagatctg gaggtagtga 300  
 tattaaagtt gtgctagtgt agtagttgtg aatttgagaa atacttgtgt tgaagtttgc 360  
 aagtcncgta gcatgcacgt atggtaaatg ttatgtaaca aa 402

<210> 5209  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-F11  
 <400> 5209

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 ggcgagcgat caaatatggt tagacataca attgtgctaa aaaatacaat tatacatgcc 120  
 aaatcgtttc tggtcgtaag tacatccac atactcagtc cgggctaaac gtttctttta 180  
 gtatgtacat tccacacagt cagtccaagg aatacgtttt cgtagtatg tacatccctt 240  
 acagttaatc caagaagtac gtttctgttc gtatatacat cccacacagt cactccaagg 300  
 aaaacgttcg ttcgcaagta catcacacac aattttcccc attaaattgt ttgtgatagc 360  
 attgccattg cacatgatat taacaatttt atccttt 397

<210> 5210  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-F2  
  
 <400> 5210

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 gatccacga ggaaattgaa cccgacgcac taccggcatc caacgtttta caccaagggtg 180  
 tttaacgaat gccactccta tgaccaagat gggaattcct ttgagctctc cctggtaaca 240  
 tccaagtgca ttggacccta tcttacaagc acgaagatcc ctaactagat attttcgcta 300  
 taggagaacg tcacgtgcac ataacacaaa tgccttcaca cattcctgta caatgtccac 360  
 tacaagtcca ctggaatcct accttat 387

<210> 5211  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-F4  
  
 <400> 5211

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 tgttgaagtt tgcaaatcct gtagcatgca catatggtaa acgttgtgtg acaaatttga 180  
 cgcattgaggt gtttctttga ttgtcctcct tatgagtggc ggtcggggac aagctatggg 240  
 cttttcctac caatcgatcc ccctaggagc atgcgcgtag tgcttggttt ttgatgactt 300  
 gtagactttt gcaataagta agttagttcc ttaggactaa tggtgagtc atggattata 360  
 cgcacttttg ccttccatca ttg 383

<210> 5212  
 <211> 416  
 <212> DNA



<223> unsure at all n locations  
<223> Clone ID: LIB104-013-Q1-E1-F7

<400> 5214

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aacatgataa acatcacatg caatcaaata gtgacatgat atggccaata tcattttgct 120  
cctttgatct ccatcttcgg ggcgctatga tcatcctcgt caccggcatg acaccatgat 180  
gtccatcatc gtgtcttcat gaagttgtca caccaatgaa tacctctacg tacatggcta 240  
acgtgttttag caataaagta tagtaattta catggcggtta ttgatgaca cgcaggtcat 300  
acacgaatta acacaattcc tatggctcct gcctgttgtc atactcatcg acatgc 356

<210> 5215  
<211> 365  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-F8

<400> 5215

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agcagaagta cagtgagatt cgcgacctg tctatcttcg gaggtgtgac atcatcaaaa 180  
caattccaga cttttggctg acagcgtttc taagtcatcc tcttctcagt gagcttttga 240  
ctgaagagga tcaaaagatg ttcaagtact tggaatctgt tgatgttgat gattctaaag 300  
atgtcaagtc aggctactcc atcactctta acttctctga gaatccgtac tttgaagaca 360  
gaaag 365

<210> 5216  
<211> 331  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-G4

<400> 5216

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gcgtgagttg gttagtctat gcatggcgtg agttagctgg tgaagttggt agctacgtgc 180  
atgcatcgca tggatatggg tgcattgtgt tgagatattc taggaggtga gtgtccgtgt 240  
gtgtacatgg atagagtttg ttagactcca agaaaaacga ggtacgtagt aggaggtggt 300  
gatgggaaag cggccgctct atggggatcc a 331

<210> 5217  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-013-Q1-E1-G5  
<400> 5217

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ttccttatgg atcccttgta ttccgaagcc cgacctttac ttgatggcta tgttgacgct 180  
tttaagcatg atcgcggtat ctagtacatc aaggagaaca ttagaagtgg agtgctaagt 240  
gtctctcggt cgatcatcca gatttttttc cttggcctcg ctaaggtgaa atctgagaaa 300  
gtgttgcttt cctttgcggc tgcattctcc atcgttattc atcattgtag tatctatttg 360  
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ttgagagcac acgcatgcac taagt 445

<210> 5218  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-013-Q1-E1-G6  
<400> 5218

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tggttgtcaa ggtgatgggt cgacgggggt cgaggggtca ggtgacccag gtgagagtca 180  
agttccttga tgaccagaac cgtctcatca tgangaacgt caagggggccc gtccgtgagg 240

gcgacatcct caccctgctc gagtccgagc gggaagccag gaggctgcgc taagaaattt 300  
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 acgctttcgt tctttgcta gctatgtgga agtghtaatga 400

<210> 5219  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-G7  
 <400> 5219

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 tcagcatgaa cctcatcagc cgccagaact tcattgtcaa agacctcaac ccctgaggac 180  
 caagactctt gaagtttgcg gtcggttgga acctttacac tgatggcgat gcctgttgct 240  
 aaatctacct atatgtgctg gctgtactct cgaggctatt ttgtctgtct caataattaa 300  
 cacaacacta ttgtgtaagg cgccgtggct atatttcttc tgaacaacac aatacaacct 360  
 gaagcacatt tgctttggac tttttgtcat cttttgtttg cataaacata t 411

<210> 5220  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-G8  
 <400> 5220

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 ggcattggag caaatgtagg tgccaatgcc ggtcttggtg tcggtgcaca taaaggtatt 180  
 ggtgctgggtg ctggtcttgg agcaaatgta cgtattggag caaatgtagg tgccaatgat 240  
 ggtcttggtg gcggtgcaaa cggtgggtgct ggtgttggtg cgaatggagg cgctaacgtt 300  
 ggatttggca ttggagcaaa tgtaggtgcc aatgccggtc ttggtgtcgg tgcacataaa 360  
 ggtattgggtg ttggtgggtgt ttt 383

<210> 5221  
 <211> 435  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-H1  
  
 <400> 5221

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 cacaagaaga aggacgggga gcacaagaag gacggcgagc acaaggaggg catgatggag 120  
 aagatcaagg agaagctcca catgggtggc ggcagcgacg agcacaagaa ggacgaggag 180  
 cacaagaagg cggaggagca caagaagaag gacgggggagc acaagaagga cggcgagcac 240  
 aaggagggca tgatggagaa gatcaaggac aagatcagcg gcgacggcca cggcgacggc 300  
 aagaaggacg gcgaccacaa ggagaagaag gacaagaaga agatgaagga caagaagcac 360  
 ggcgagggcc acaaggacga cgactgccac ggcagcagca gcagccacag cgacagccac 420  
 tgagccagct ccggc 435

<210> 5222  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-H11  
  
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 aggggggcttc tccgcccctc cggcaccgcc gcctcatgag atgcatcctt cacaccagat 180  
 gccacctgct catcatggaa atgagatgca tccttcacac cagatgccac ctgctcatca 240  
 tggaaatgag atgcatcctc cacaccagat gccacctgct catcatggaa atcagcagag 300  
 accggcaagt ggtgcccctg gaactggcca accacctccg tattaccacc attaagtgtg 360  
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 ctaccccat 429

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 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-H3  
  
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 gcatgtggcg gcgaggaact ggggacacca taccgggaca catccggcga gtggtgtcgg 120  
 cacgaggacg atgattccga agatcttgag ccctggcagt tggacggtga gccggtatcc 180  
 gacgcggaaa ccaccaatga ggagtaatgc agcaacttgg ccctatgctg ccgtgtgcc 240  
 tgtttgcttg cccagaatg atcgaaacag ctctcatcag tcgtgtgttg gtctcttggt 300  
 gtattaccgg ataagctata tttcttgcc gttatcttcc ctcatgtgcc cgttccgtgt 360  
 gcatatggca tcctgtttgt tgttacattg tgctatatag gctgtagtat tcagattctg 420  
 gatgttattt atggaaacat ttgc 444

<210> 5224  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-H5  
  
 <400> 5224  
  
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 ggcagtacca cgtatttacc actagtttat gtaaactga ccagaagggtt cataagagag 120  
 ctgtcaattc tgttgagtcg gcgattcctc attatttgag gtggtcagaa cageccatca 180  
 tatggagcaa agaggatcac cctccacggg tcgataatgc gggtcagtta gccttggtgg 240  
 tagcacccca gggttggtgga tataaatcca ctaagggtgct catggacggc ggtagcagca 300  
 tcaacatcct ctactatcaa acttttcagc gtatgggggtt aactgataaa aatctgagga 360  
 catccaacac agttttcaat ggagtggtn ctggtaag 398

<210> 5225  
 <211> 443  
 <212> DNA



<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB104-013-Q1-E1-H6

<400>      5225

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ttttatagaa ataattgatc tctcatgctt cacttatatt attttgagag tccttttagaa 120
caacatggca atttactttt aggcataata aaaacttcca tataagtgca ttgaatacta 180
tgagaagttt ggtacttgat aattgttttg agatatggag atggtgatat tagagtcatt 240
ctagttgagt agttgtgaat ttgagaaata cttgtgttga agtttgtgat tcccgttagca 300
tgcacgtatg gtgaaccatt atgtgatgaa gtcagagcat gatttattta tttattgcct 360
tccttatgag tggcgggttg ggacgagcga tgggtctttc ctaccaatct atcgccctat 420
gagcatgcgc atagtacttt ttt 443
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<210>      5226

<211>      376

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-013-Q1-E1-H7

<400>      5226

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gtataccctc aaatttacat ggcgatatgg tttattccct tcccttttat ttccgggtct 120
atggttttat attgagtgaac gcggtacaaa atcatcatgc tttttttata taacttactt 180
tacttttagta agatctacgc accatgtttc actttggccg aaatcgatgt caacagatgc 240
ctctcgaggt ctgaatgcga atgttattct ctaattcgga ttcaaaaactc gagagtacat 300
gtatcttata tttacgtgcc tcagacatat ggcttggcgc tggaagtgta tgcattgcat 360
atcaaaatag cgtctt 376
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<210>      5227

<211>      294

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-014-Q1-E1-A1

<400> 5227

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tttttttttc ttttctttta gttggcggtg gctgaaggac gacagagttt cgtccgcca 120  
cctaaattgc ttagcgtaca acgtgagggg tacttttatg tattcacggt tagatcccat 180  
tgagtaggct tatcttgacc ctccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacaaa aaaaaaaaag caaa 294

<210> 5228

<211> 271

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-A11

<400> 5228

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gcacccaatg caaggtctac aacggcaagt atgggtgatca cattgtggcc aatagagttc 120  
tcaatagtgt tggtagcgtc gaagaattgg taacacttga tgatcgcgtc aaccgagacc 180  
tagataggat ttgtcaagtc atgcatcaca agcttgctga gttcaatgac tcatgcaaag 240  
atccatgcat cgtcaatgca actgatctgc t 271

<210> 5229

<211> 395

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-014-Q1-E1-B12

<400> 5229

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cgtgggcata gtatgggctg tctgcgtcgt atgcatcagc cgaagcttag tagacgttag 180  
ggactgagcg acgcgcgccg ggttgactg gtaagcacct tcctttttga aggaggtagc 240  
taggtctgct caccggccgc gtacgcaacg tgtaggtgtt cctggggcga tggcccatga 300

cccttggggg cataggttta gtccggcgtg ctgacctctc tattaagcct aggtctgggt 360  
gtggcgctant gtttgggcca ggccgggcat gacct 395

<210> 5230  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-B6  
  
<400> 5230

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gaatataata cctaaaatgc acaactttga tgtgccacac atgootcaaa caccgtaaac 120  
ccatgtactc acatagagca aggttacata tgatgggtccc cttccccctc ctcgacgcat 180  
actatatgct cctaccataa tacaacccaa aaagaatctt catogatggg gaaattaatt 240  
aacctctcct gatgtaggtc aaagtgatgc acatgcatca acgatggcct cttggggcca 300  
cagatggaag tgtcacacgt gaatgtccta gctaggataa ccaccgcctg catgcaagtg 360  
gcgcaaagag gtgttgtgtg atgtttgaat agccattttc acaattttga tgtggcacgt 420  
gcctcggaaa ccgaaaagtc ccgacac 447

<210> 5231  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-B8  
  
<400> 5231

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agaaagtttt gcgctcacga gattagctac catattttac tggagagtga ttttaggttg 180  
atcctttttg catatgattt atagacaaat taccaggtc caacaatttg tttcagaatt 240  
tttggagtta cagaaatatt ctaatgatac agattactac agactgttca gtttttgaca 300  
gattctgttt tctatgtgtt gtttgcttat tttgatgaat ctatgagtaa tatcagaggg 360  
tatgaaacat agattagttg gaatacagta gatatgacac caatattaat tttaaatgag 420

ttcatgac

428

<210> 5232

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C10

<400> 5232

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tcgcaatatt cagattgctt ttatcatatt cttgcttggt cttcgattgc ttgcaggaat 120

agaccttcgt ggtcagggtg attgtgctcc ggcattggta ataacctctc ggagttgggt 180

tagcgattgc taaggcgcaa cgtcgtgcac gttttagtgc ggatcgtcaa agtcgtctcc 240

accaaatacga tagttatcat ctcatcgaaa gatcgggaca cccccgcctc tatcaagtgg 300

tatcagtttt caggttgctc ggtgagaatt tccagttttc ctagattaga tttattttct 360

tacctattgt ccatgaaaaa gccacataaa agagtttagat ctattcatcc ttgggtccaag 420

ccagtctgag cctgtgc 437

<210> 5233

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C11

<400> 5233

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gtcgtggcac tcctttaaaag gatataccaa gtgtggcaca gaggttaacg aggaagaaac 120

ctgctgatcg taaatttctt cacaatgttc tttttgggag gaaaggcaag actgtcgatt 180

ttaaaggcca tatacttcag ttctctggat ttgtgtggca tgagagcgat gaaaagcaga 240

gagccaaggc aaaggagaag cttgacaagt gtatgaaaga catgctggtg gatctctggt 300

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tgttggactt cattgctgaa cctc 384

<210> 5234

<211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-C5  
  
 <400> 5234  
  
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 tctggatatgg tagtgtcgat tgtattgtct acatttttta tataccatta cttgtgcaag 120  
 atactatcat gtgaccaata aacattgggt tagttgcgct gcttatgtta tggatacgtg 180  
 tgtaaaactca agtttgatgt tataaagtgg catttggtta tgcatacaaaa gacaaaaaatt 240  
 taaaacgagt gtaaaaattg aacataaacac aatcagaaga aaataaaagc gacaaaaaaa 300  
 tttgaaaagt ttgaaataaa acggggccgc ccaaagggtt caagccttag ttacccttaa 360  
 atgcaattta aaacctctcc aaaaggcccc ccaaatttca ttccaggggc cttctttt 417

<210> 5235  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-C6  
  
 <400> 5235  
  
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 acctggaaaa accagcatgc gttgctcctg tcaactaggg aatggaatgg atctggcacc 180  
 gtagaatctt ctttcttctc ttttgattgg ttcagtagat atgtggcacg agaacagacc 240  
 gcctgtaagt tgtaactatg tgtatgtaag ttgcgagctt tcttgcttg tctcatgttt 300  
 cttgcattct tcagtgatgc tgagatttct gttcagatcc gtatgtacat tacagacagt 360  
 gatttgcttc caaaaaataa taaatgatgt atgttttcaa a 401

<210> 5236  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-C7

<400> 5236

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ggggttatag ttaaagcagc cagtagaaaa ccaaaataac tagttaaagt aagcatgaaa 180  
gagttaaatt ccatttattt tttttttact acactacata tgttggtaaa gcattttacct 240  
aagttatgga aaattcataa ttcattcagtt attttagata atactaaaaa acaagataga 300  
gtaagataca gaagtgtaaa agaaagtgga ttcattcagat gatacatgag tccctaattc 360  
cgaatcaaga gatttggtgt ggaatttgtc aattgagtaa agtaataata ttaagaact 419

<210> 5237

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C8

<400> 5237

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catcgacttg gaacatgctt gtctgatgcc attccaactc cggcattttc aaagtccaaa 120  
ctgtgactgt gaaaccagat ttcttcatgc ttccaaaaaa gccattatcg atgtcaacaa 180  
agttaacaat acctttgcat acaccaacag ttctatatgc ctccagggtat acacgaccat 240  
aagagagatc atcgagctca gtccaaattt ctatccctgg aagctggatg aaacggagct 300  
ctagattttc accagcagaa agcacgttgc aggacaataa gccgcggtgg taatccaccc 360  
agtatattgt accatctgga taggagaata cctgatctgt ctcccat 407

<210> 5238

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C9

<400> 5238

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aggacatgaa gtccgggccg gacagggctc cgttccata caagtgatcc aggggagggg 120

aacgctagag agatggcgtg tgcattgcga agcacgggca cgttcgtgcg tgtacaagat 180  
 agtgtgtgag cccagccgca atttgttgcc cgtactgttt gtcacttgac ttgtcaagcc 240  
 ctgtataact gtggtatgtg tgtgccggat ggatgactca ccatataaat aatactacga 300  
 tcttgggtca aaaaagaaaa aacaataaga aaaattttga agaaaaataa caatacaact 360  
 gttatcaaaa agcggccgct ctaaaggatc caagcttac 399

<210> 5239  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-D10

<400> 5239

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 aggacaccat ctgcattgtt cttgctgatg acacatgtga ggagcccaaa gtcacaatga 180  
 aaaaaactgt cacgaaaaac ttgagagtgt gacatggtga tatggtgtct gtgtaacaaa 240  
 gccccatat gtaatatagg aaacgcgtgt acatacatcc catagaggag acactttaaa 300  
 ggggatcacg ggacatttgt tacacccttt ctaaacata cattccttta acccaaagcc 360  
 ccttttgaaa ag 372

<210> 5240  
 <211> 96  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-D12

<400> 5240

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<210> 5241  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-D3

<400> 5241

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tccaaccccc ttctcccca aattaaggag gaccacccc aaccggaccc ccaaaacttc 120  
aaacccttcg tctcaacctc ggacaaaaaa tggggccaac ttcaacaaac ctgttcagcc 180  
gcctctttgc caaaaaggaa atgaggattc ccatggttgg tcttgatgcc gctggtaaaa 240  
acaccatcct ctacaagctc aagctcggag agatcgtcac caccatccca accatcggat 300  
ttaacgtcga aactgttgaa tacaagaaca tcagcttcac tg 342

<210> 5242

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-D5

<400> 5242

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agaggccaga gacctacaag cagtggcagg tgcggaatca gagagctggg ttcaagcagc 120  
tcccgtcga ccaggaaatc atgaagcgtg cacgggagaa agtgaagtgc taccacaaga 180  
atttcatcat cgacgaggac aacgggtggt tactacaagg atggaagggg cgtatcctgt 240  
acgcgctctc aacatggaag gcgaaccccc aattctagct tctgtaaattg gtgacctgtt 300  
catatctttg gactctagag ctgattggtc ctggccaaca acccattagt agatgatgaa 360  
cctgattact ctctgtagc atctgcctgt tgtatgtgct gcccatgca 409

<210> 5243

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-D6

<400> 5243

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ctccccattg gcttcggctt ccgccaagg cgccatgtga agcgaggccc catccccggc 180  
tctgttcttg tcaggcacta tcttcgtaag aggaggatgc ttgcttcttc gatatcaagt 240  
cactgtgaag ggtcaagttc tgaatcgta attaaggcaa aagaatggat ggtggatctt 300  
gttgattcat gtttgaagc tggtaacggc catcaagggt atccacttca atatgtttgt 360  
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ttc 423

<210> 5244  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-014-Q1-E1-D8  
<400> 5244

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gcttgttacc ttgctgtttt tatattttca gattacaaaa acctatatct accatccata 120  
ttgcacttgt atcaccatct ctgcgcgaa ctagtgcacc tatacaattt accattgtat 180  
tgggtgtgtt ggggacacaa gagactcttt gctatttggg tgcagggttg tttgaaagag 240  
accatcttta tctacgcct cccacagatt gataaacctt aggtcatcca cttgagggaa 300  
atttgcctacc gtctacaaa cctctacact tggaagccca acaacgtota caagaagaag 360  
tttacgtagt agacatcaca ccaccggatc gttgaagctc tgccgagggt gcaatgaaac 420  
gttgtcgcgc atggacttcg cctggggg 448

<210> 5245  
<211> 337  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-014-Q1-E1-E10  
<400> 5245

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gcagctcgat tgatgtgtat gacggcgagg atgaatcatg acacgacaga taacattaat 180

ctgaagtggg agtctaatag catgtgaata gatgatgtac aatacatcac caaaaagtgc 240  
tagatgtgca atgcatcaac cacgccatgg ccgctctgac tgatgcagta aatactgttg 300  
actcagaact taattgaaga aactgaactt tacagtc 337

<210> 5246  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-E11  
  
<400> 5246

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gagctatgct ccccggaac ggccagaa attagtcttg ataaccaca agttagggg 120  
atcacaacag ctttcgagg tagagtattc aaccgaatt tattgatttg acacaagggg 180  
agccaaagaa tattctcaag tattagcaga tgagttgtca attcaaccac acctggaaac 240  
ttagtatctg caataaagtg ttagtagca aagtaatttg atagtggcgg tagcggcaac 300  
aaaactaat acagcaaaaa taatgttttt ggtattttgt agtgattata gcagtagcag 360  
cgggaaagta aacaagcgag aaccagtata tggaaaactc gtaaggcacg gatcagtgat 420  
ggataaatat gccggatg 438

<210> 5247  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-014-Q1-E1-E12  
  
<400> 5247

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taaattccagg cataatgcga gcgccaggat ttgaatcctg gtgggttggg gataccactg 120  
tccacctaac caactcaacc acaggttgat tcgccaaaac tttttctttt gcgggttata 180  
gcttcatagc ttaggttccg tatattggat tgcgtgtcgc acgtggcgta cgtatggtac 240  
ggacgtattt aaccaggatc taatcgacct ttactttccc tataaaaaat ggcctttact 300  
gtaagggaag gagaacatac accatgcac aggcatgaac attgcaaagc aaaacgttca 360

agtgccatgc ggcgagaagc tttgttctan ggcattgacat atcacgccta tttctctcttc 420  
tccgcatg 428

<210> 5248  
<211> 195  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-E2  
  
<400> 5248

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cgaaataatg ctcatgttcg aaagaatgtg tgagagtaga ctttacgcaa aacggccgct 120  
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ctagattgag ttcac 195

<210> 5249  
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<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-014-Q1-E1-E4  
  
<400> 5249

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gcttgcaaag ctgaacagga aataaaacga cgtgttgaggc acgaggagaa caagcgacg 120  
gtgcacattc caagagttga tatgattgta aatcatcaaa gcgatactat gacaaccaca 180  
tccgttggtg tcaggactac atcacctcca ccatgtgaca catcgcccc gagagtggct 240  
acatcatctg agttgatcat aagaggtaat gacaaaggta ctgatcttcc atctctacat 300  
gagaatgatg aatgccttgt caatttgaat gcaccatctg atgagctacc cactactttg 360  
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actg 424

<210> 5250  
<211> 416  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-014-Q1-E1-E5

<400>       5250

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gtgttctgga ctgaattagg acttccaagg ctgttttttc cctgcagaac aaggaacaga   180  
agttaacatc tgacgatttt atattggctt tgccaagtga acaatcaatc aggcgacaga   240  
ctctacaaat attccgtggg ttcacacagg aaagttcaga aatttcagag aaacgacttc   300  
agattcagac tcagagttga atgtaggctg gagattcagg atcatagcca gatagcctcc   360  
acagcaatca atcccggcat cgcaagcttc ggcaaagata gtatggcatt tcagac       416

<210>       5251

<211>       406

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-014-Q1-E1-E7

<400>       5251

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atccgcaaaa agcggggtga atgaagcttt tacgagcctg ctaagaggct ttgaggtacg   180  
caaagtaata tatatatata tatatttgac tgtaccgcat acgcaagggt tgctctgtat   240  
agatagtatc ccctgagact ctggttgccg tccaaacatg gcgaacaaag gatcatagtc   300  
tcacgtaatg ataccgttgt tttcgtgcgc aggcagctgc aaatccggcg actgaccgaa   360  
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<210>       5252

<211>       302

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-014-Q1-E1-E8

<400>       5252

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 tgtgctatga tcataaagtt ggtcctggaa tgacgagcat ccgagttggg tctgggaaaa 180  
 acttgagtt gaagtgtgtt ggcacctagg atcagtttga tctttcgaca attgtcgtga 240  
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 gg 302

<210> 5253  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-E9

<400> 5253

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 gggcattttt tgtatgaaac attagtattt agactaacia tatgtgaatt gaaactaaca 180  
 tatagtatta tattcgctta ttctgtagta tgcattggtg attttaattg gggctctttc 240  
 tcatgaatgc atagtggcac gatgtggcat atttgcattg taagagaatt aaagatagtg 300  
 gggatcaatt acttaggtca tgcttgggtg catgatgagc tgacatagtt gcatgttgag 360  
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<210> 5254  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-014-Q1-E1-F1

<400> 5254

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 caagtgggtc aagaggatcc ttgcaaactg gcagtcggca cagcgggtcac gcgtgcgcaa 180  
 gctgcagtac atctcggagc ttgagcgcag cgtcacgtcg ctccagacgg aggtgtcggc 240

attgtccccg cgtgtggcat tctctgacca ccaacgctca ctgctgacgc tggggaacag 300  
ccacctcaag cagcgcattg cggcgcctgc gcgggacaag atcttcaaag atgctcatca 360  
ggaggcactg aagaaggaga tagagaggct gaggcanatc ttacagcagc agagcc 416

<210> 5255  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-F11  
  
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agtaaggaac ctatgagaaa gaagtcattc aaaggtttac cagtcagcac catggatgtt 180  
gggctagcca gcctgggttt gatcatcagc tctatcttaa tttgattgat acctaggtcc 240  
tccaacgcat cactcttttt ttcatgttaa acgtatgagt gatgaataat agtgcctatt 300  
tgttcatcgc ttactatgcc tgtgttaa atagtgccggg ttggctactg cattttatga 360  
ttattgtagt tatccacatg aaagtgtctg tgcttttaata tataatt 407

<210> 5256  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-F6  
  
<400> 5256

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attccaagag gaaagtgaac ccgacgcgct accgggagcc gaggttctac accaaggtgt 180  
ttaaggaatg ccaactcctat gaccaagagg ggaattcctt tgagctttct ctggtaactt 240  
ccaagtgcatt tggagcttat gtgaaaagca agaagaacca gaaccagata tgttggtgt 300  
gggagaaggt caagtgcaca gaagacaaag gctttcagag attcctggac aatgtgcagt 360  
acaaatccac tgggaatctt cgttatgagc gcgtgtttgg ggagggttat gttagcaccg 420

gtggattcga gaacac

436

<210> 5257  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-014-Q1-E1-G1  
  
<400> 5257

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gggtgggggtgt ttggcgctct tcgtgtcact gatgacctgt tgatgaggag ggcgtatattt 180  
aggaagcagc agcttgacaa caaaacaaca tcacctact ctaactgaag aggacagccg 240  
gtgtgatttg ctcttacatt gatatcgcat gcgtatgaat aatgggtccaa tggaattggg 300  
agcggagtaa gaagctcatg ttgcctttat gcatgtaata atcatgcctg cctgcatggc 360  
ccgctagctg ttgggtccaat gcttggctgc ctgcctgaac tggcgtcaat ttccaagttt 420  
gtttttgtat atataa 436

<210> 5258  
<211> 364  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-G10  
  
<400> 5258

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tgaacagcgt caacactgcc ttccggcacat atgtggtggt actcagaagg acctccaggg 120  
ctgatacaac aatcagaata aataaatgtc taagcatact gttctgattg tagttccata 180  
actgtaaadc tgtaactata tgggtattgtg attctgtcgc aagtagaata aagaccccg 240  
gtatgctaca aaaaaaaaaa caaaaaaaaaa agaaagagac agattaaaac gataaaaaaca 300  
aaagtagacg tcccagaaag ttcaaagtaa cgtctagatt gtaaaaaaaaa gcggccgccc 360  
taaa 364

<210> 5259  
 <211> 170  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-G4

<400> 5259

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 tacatcctat gtcggaggtc atcgatgctg acatcgaaat tcaattcatc 170

<210> 5260  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-G7

<400> 5260

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 atccttattg tacacacctt ttgagagagc catacatgaa ttaaaatttg atagaatact 180  
 ctatgtgctt cacttatatc ttttgagcta tgtaattttg ctctatgtgc ttcacttata 240  
 tcttttgagc tacgtagttt ttctctatgt gcttcactta tatcttttga gcgttataat 300  
 tttgctctat gtgcttcact tagatatttt agagcacggg ggtggatttg ttttaaataa 360  
 actattgatc tctcatgctt cacttaaatt attttgagag tctcttaata gcatggtaat 420  
 ttgcttaata ataatatg 438

<210> 5261  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-G9

<400> 5261

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cgatgctccg gcgatagaga aggaccagat cgacacgttc gtgcctgctc cggcagccaa 240  
ggccaacgag gatgccggtg ccaccttctt ggctgccccg gtggccggtg atgatggcag 300  
tgctctcttc gttgctgctc cggcggccaa tgaggacgaa cttgtatcca tctcgtctgc 360  
tcc 363

<210> 5262  
<211> 371  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-H1

<400> 5262

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tgagttagtc ttaaagggtga gatcaggaac ctatcttctg tttatcattc cacacatgca 180  
atatgggttt ccctctgaat ctcatgata tctcactaat atgtagacta aagaaccatt 240  
gcaattgtag gacagaaaat aaatattaat cacaacatgg aaataaataa taacatttac 300  
cattgctgtt agggcatatt taaaatataa taaatcaaca atgttgatga gatgggagag 360  
cttaaataca g 371

<210> 5263  
<211> 410  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-H5

<400> 5263

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agcatcaatt gtttttcagt tccagaacgc tgttgactta aacatgggtt ccctcttttg 180  
cgaatgagta tgagcatgat ttctaagtgg ccgtaacatc gctagcctag atatccctgc 240

tctggatttg tatgaatacc ccagtgtcag tgtggttgta atttgggggt ttgtagctgg 300  
tcggttattc tgtctgttgg tatattggaa ttagacttta aacctgtgat gataactgaag 360  
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<210> 5264  
<211> 382  
<212> DNA  
<213> Triticum aestivum  
  
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<400> 5264

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gtgtctgcaa acatcccat ggccctctc ttggggctac tgaaacccaa cggcaagatg 180  
atcatggttg gcctccaga gaagcctatg gagatcccc cctttgctct ggttgctacg 240  
aacaagacc tgccgggag ctgcatcggc ggcatgagg acaccagga gatgctcgac 300  
ctcgccgcca agcatgacgt gacggcggac atcgaggta ttgacgtcga gtacgtgaac 360  
acggccatgg agcgccttgc ca 382

<210> 5265  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-H7  
  
<400> 5265

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ttctggctct ctccaggcaa aagcttctc atctgcctg tacctcaatt gagggcgttg 180  
cgaagggttg atacactatc tctgacaact cgaccgacaa caagcctgac ttcatacataa 240  
tgagcactgg ttctgaggta gagattgctg tgaaggctgc cgaagagttg acgaaggagg 300  
ggaagactgt ccgcgttggt tcatttgtct gctgggagct ttctgacgag cagtcagatg 360  
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<210> 5266  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-A1

<400> 5266

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 cggatgccgg agctgcagca gtgggggtgga gcctggcgga ggggaggagc gatggaggaa 180  
 gacgaagatc cccggcgaca agaatttcaa attgagggtg gtttgggtact ttttcctggt 240  
 ttcacctggt cggagaagtt cccaacgac aactattttg gaacagaggg agtatatggt 300  
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<210> 5267  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-A10

<400> 5267

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 acggtcgtgg gagaccaagg acagccagct gacgatggtg gcggacgacc tgaagccgcg 180  
 ggcggtgctg acgtgcccgga agaagaagtt gatccagcag gtggtgttcg ccagctacgg 240  
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 ggagattgtg gagaaggcgt gcgtggggaa gaggaactgc gtgctggccg tggtccacaa 360  
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 gtgctcc 427

<210> 5268  
 <211> 327  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-A8

<400> 5268

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gtagagagat tatgctttgc tctatcactg tggcaaatgc aataatgtat cccttctgta 180  
ctatcattag gatttgaatg aatgcaataa aggatgggtgc tccttgtaaa aaaaaagaaa 240  
atgaaacaaa acaaaaatag aaaaaaaga aagtaaaaac aaagaagaaa aaagaagatg 300  
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<210> 5269

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-B11

<400> 5269

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cgggaaggca tccccctctt cgtcttcgtt cattggtaac tttacttgga gctatatttt 180  
tattcgccac acgatatgtg ttttgcttgg agcgtcgtgt attatattag tatttgcttt 240  
ttagtttacc acaacaatcc tttctttaca caccttttgg gagaagccta ctttattaga 300  
aatttattag aatattcctag tgcttcact 329

<210> 5270

<211> 59

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-B12

<400> 5270

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<210> 5271

<211> 320

<212> DNA

*Journal of the American Medical Association*, Vol. 60, No. 17, May 19, 1918, pp. 1311-1312.

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*Journal of the American Medical Association*, Vol. 68, No. 10, May 19, 1927, pp. 10-11.

[illegible][illegible]

*Journal of the American Medical Association*, Vol. 60, No. 17, May 19, 1918, pp. 1455-1456.

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*Journal of the American Medical Association*, Vol. 68, No. 10, May 19, 1927, pp. 10-11.

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ggcctgtggc aatttttggg ggattcccat ctactgcatg gtttgatggt gctgatcttt 300  
cagaagattc tcttgatgat gttgaggggc tggattcctc agctgcacat gttgcaaatt 360  
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<211> 317  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
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<400> 5274

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tttcttgctg tcgtcccgct gcctgctata acggacagcg ctccctgttg gcgccgccgc 180  
cggcgggggt ggtgccttgg cggcggaggg tgtatgtcct ctgccgccgg gtgctcncct 240  
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atatcagtct gggtaat 317

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<211> 242  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
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<400> 5275

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gcatcaccaa cgtcgactcc gttcactcga tctcagtaat tgtcattacg ttgtcaaadc 180  
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gt

242

<210> 5276  
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<212> DNA  
<213> Triticum aestivum  
  
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ccggtgattt gatttgattt tcagagggaa gccagctatt gtctgccttt tgtgatcgta 180  
atgttgcttc ctctatatat gagctatgaa aataattaag cgatgcctat ctcatctttt 240  
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<212> DNA  
<213> Triticum aestivum  
  
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gtccctcaa cgtccctac ttcttcgtca caccacaagg ggtccgggag aagaaccccc 180  
ggttcgtgga gcaggtcggc tctcttca ccacagacca atacatactt gtcgggtgcc 240  
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tgaagaacgt gggaggaggc tacgctgcgt ggctgcacaa cggactctcg gttacaatgg 360  
gagtcccaa acggccacca naacctgaat ctgctgcagc aatctgaatc aactagtagt 420  
acgtactacc ttagcatct atcaattct 449

<210> 5278  
<211> 435

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-015-Q1-E1-C3  
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cgtcccacct ttggggacga aatgatatcc attgcctcta ttgctttcaa gtttttttct 120
cgtgtcaaca tagaacaaca ggagtgttgt gtgaattttt gtgatttttc ggggttcatg 180
tggacatttt tatgcattaa ctgagttttc aatgcattta tgtgcataat tcaaatatga 240
actacatacg catgcttctg tggacataaa ttggttgaaa aatcaaactt gtgtccttgg 300
gtgcatgctt aggtcccatg caagaaatgg gaatgaattt caaacacgat ggcacccgtt 360
gattgccggc aaaacaatga gatgcctggg tttctaaatc tagtaaatca aaaactcgtc 420
taaaattcat gaaac 435
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<210> 5279  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-015-Q1-E1-C4  
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ccggtccaga attccccgggt cgacgggtac cttatgtggt ggttttgttt tctttcacta 60
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agcttttatg gactatggaa taaggagtgg caagagccta agcttgggga tgcccttggc 180
acccaatct attcaaggat agccaaaatc ctaagcttgg ggatgccccg ggaaggcatc 240
ccctttttcg tctccgttca ttggtaactt tacttggagc tatattttta ttccgccat 300
gatatgtgtt ttgcttggag cgtcgtgtat tatattagta tttgcttttt agtttaccaa 360
aattatcctt gatgtataca ctttttggga gaatcccat tgcattagaat ctgccagaat 420
actcctatga gcttcacttg t 441
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<210> 5280  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-015-Q1-E1-C5

<400> 5280

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aaggtcggat atgccctgct ttgctgctct gcttttcctc atatgatcct agtgtggagt 120  
gctcggcctt tgcaagctgt aatcctaatt tcctttgcat tagctgcttg tggagggttg 180  
agttagcgtt tcagtccagt gtttccattg tacccttctg cccgctgtaa tttgggttgt 240  
tgctgtaact cctggccggg tgatggcttt gtaattcaa agccgggctc ctctgagacc 300  
ttcgtttctaa aaaaaagaaa taagtattct tagtctgtca tactatttta tagaaacccc 360  
cccgatgttt cttatattaa aaccgcgagt acataataaa tgtttttttt aaatactcgt 420  
tacctctaaa ccgtaactat aaattt 446

<210> 5281

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-C6

<400> 5281

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tagatacaaa tggttgaaaa aaaattgcat ggagaagggtt accttaaatt tacgtcggca 120  
aaaaattcaa cctcttctgc tttgggcact caatgcttgt tttattgcaa aagaattctt 180  
tctttcttgc atcaatctgt gttgaagtga aacactcgtt aaagtagaag cctagtctag 240  
tcataaagat aaggaactac tttaaaatga atcagattgt ccacattcaa taacaagaat 300  
gaatatcttc atttacagtc atattcaaca tacccttaag atgactaaaa tagacttggt 360  
gtaatttaca gaaaagaaat acatgagata agtcacctac ctcatctatc atttaggaga 420  
gggttagtat atgaagaaag a 441

<210> 5282

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-C7

<400> 5282

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gagtgcccg agctggggcc gatcggggac ctgcttgtgt ccaaggactt ccagaccaag 120  
gcgtccgtgc tgggtggtgca gtcctatggg agggcggcgg cggcggcggc cgcgtcgacg 180  
tcttctgaat ttgctgttgg cgaggccgtc ttgccggcgc cagaggccat catgccggcg 240  
acctccatgg ggcacccgcc aatgcgcca cgacaacatt cacattctga ccttatgctt 300  
tgatagtagt atagtttggg aaagcttgct agcacattga ttaattaatt aattaattag 360  
ggagcgccta atttttgcac gggaattacg aagtgtctga tg 402

<210> 5283

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-D1

<400> 5283

cgggtccagaa atccccgggtc gacgggttgg gtcatatatt cctcaaatat gcccaaatat 60  
ttccttaacc agttcaaaaa taattcccca atattacttc ttcacttctc tccagaaggg 120  
cactttgtga aggaagtatc atttatatta ttctgtttgc tccaaacttt ttgggaattc 180  
tcttatgtcc aaatgattgc cacatgccaa aacgcaactt cattttccta ctgaatcttc 240  
cttagtgatt tttcaaagtt tcggttcaaa tagaagcttt gtgaaggaag tactagctag 300  
gagtatccaa ataagtttaa atttgcatgc ctcttcatgt gctccatccc ttgatctatg 360  
tgagcacatg accaaatctt tga 383

<210> 5284

<211> 325

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-D10

<400> 5284

ggtcaagaat acccgggtcg acgggacgtg acggatcgct aaacctagac aaatattgag 60  
ggaaatggag cttggagggtc aagcttggag aggagaaagc ttaagtagtg tggctcgggc 120

attccatcga acacctcgtg tgcataggat gtgagctaga gcaccacaaa gctctcccct 180  
cgccggcgac gaaaaacaga gcagtgggag tgctctgctc gcgggcgagg ggtatatata 240  
gtcaactaat tgggtccggg tctgtggccag aaccgggact aaagggcaac ctttgggtccc 300  
ggttcaagcc accaaccggg accaa 325

<210> 5285  
<211> 334  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-015-Q1-E1-D11  
  
<400> 5285

ggtcaagaat taccggggtcg acgggggaac gatgagatca tggctanggg aacttttgcc 60  
aacattcgta ttgtgaacaa gttcttgaag ggagagggtg gcccccaaac catccatgta 120  
ccatcagggg agaagcttgc tgtttttgat gctgctatga aatacaagaa cgaagggcat 180  
gacactatca tcctgggtgg tgctgagtat ggcagtggaa gctcaaggga ttgggctgcg 240  
aagggtccaa tgcttcaggg agtgaaggct gtgatagcca agagttttga gaggattcac 300  
cgtagcaatc tcgctggaat gggcatcgtc cctc 334

<210> 5286  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-015-Q1-E1-D3  
  
<400> 5286

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atgttgata gcggtcgatg tgtggagtaa tagtagtaga tgcaggcagg agtcgggtcta 120  
cttgttttgg atgtgatgoc tatatacatg atcatgccta gataacgtca taattattcg 180  
cttttctatc aactgcttga cagtaatttg ttcacccacc gtaatactta tgctctcgag 240  
agaagcctct agtgaaacct atggcccctg ggtctatctc ttaccatatt tgttttcaac 300  
ttacttttat ttgcatcttc acttttcttg atctatatta taaaatacca naaatatatt 360

tatcttatca tactatcttt ataagatctc actttcgcaa gtggccctga aagggtattga 420  
caac 424

<210> 5287  
<211> 363  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-015-Q1-E1-D5  
  
<400> 5287

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gtacatgcgt taatttacgc cccttactgt agatgcaaaa tccagggtag gtgcgagcat 120  
aaaatgaaga gggtcacatg cgttaattta cgtttagtcc tttcagtgtc acgaggcaga 180  
caccctcgtc ggttcgatct ttttcagctc caatcaggcc gccacatagg aggcgtaggc 240  
acgcaccatc cgcagcgacc gtcgagcacg agcacatgga tgtattattg gcagaaccag 300  
ctgccttggc cgtctcttga cacaactaac cctccgtcca caatatgttt tcaagcaact 360  
ttt 363

<210> 5288  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-015-Q1-E1-D6  
  
<400> 5288

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caaggacaag atcagcggcg acggccacgg cgacggcaag aaggacggcg agcacaagga 120  
gaagaaggac aagaagaaga agaaggacaa gaagcacggc gagggccaca aggacgacga 180  
cggccacggc agcagcagca gcgacagcga cagcgactga gccagctccg gcccgcgctc 240  
cggcagcgtg cagtgtaggc gagatcgatg atgaacactt gggagaagtg tgacagacat 300  
atatgttgca gggtttgag cgtgtggtag catatgtatg taatgcgtga catgcctcat 360  
ggatcttctg atgtataata attagccggc cgcactgcac tgaacggtgc ttgtaataat 420  
aacgttaatc atgttggtat tgatgtat 448

<210> 5289  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-D7  
  
 <400> 5289

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 atgggttatga atttggtccc agaatgatga gcatccaact tgggtataat aaaaactatc 120  
 atagaaagtg cattaacac taggatcaat ttggttcttg ataattgttt tgagatataa 180  
 aggtagtaat gttaagatcc atgctagtgg gtaattatga aattgataaa tacttggtgtt 240  
 gaagttggca agtcccgttg catgcacgta tggtaaaagt tgtgtgacaa atttgttgct 300  
 tgaggtgctc ttttgattgt ctcccttatg agtggcactc ggggacgagc gatgggtctt 360  
 tcctaccaat ctatccctct aggggcatg 389

<210> 5290  
 <211> 327  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-D9  
  
 <400> 5290

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 ttatcaagaa gggcccagct cgctcctagc ccttctgctc ttctctggtg ttgcctctgc 120  
 cagcccccta gcatcgccc atggtgatct tgactatggc ggtggagtga agaaatctga 180  
 agctaccggc ggatacaccg ccggtattga gaagaaacc gaagctgtct cggccagtgc 240  
 tgagaataaa cccgaagcca tctccgtg tgtggagaag aaaccagatg ccgtctccgg 300  
 aacagacgtc tcctccagcg cggagac 327

<210> 5291  
 <211> 332  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-E10

<400> 5291

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ccatgggagc aggtgatgtg ctctatagt cctatggttt gcagcgggat tggagtgggg 120  
cgatgctaca agagatatgt ttgatacatt gtcgttgccct ttatctggtt cattaccctt 180  
tatatggatg agggggacat ggattgatta cctctaatt gtggtttgtg ttggactctg 240  
gttatctcgg cgtcgcgtga tgggcgcttg cctgggtaaa aaaaagaaaa aaaaaaaaaa 300  
aaaaaaaaagc ggccgctcta aaggatccaa gc 332

<210> 5292

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-E12

<400> 5292

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tgtcagagtc gccgccatca gaagagaagg aggagtcaca caagtctttc gagttcccc 120  
tgtccaaaga tttggctgca caatcagcag atgttgggtc tagcacgcc aagattcaga 180  
tgccgctctg acctgctgaa gttaccactg ctgcgaccac tcgtgccaag tcaacagtga 240  
aggctgaatc gtgcaactccc aacgtgcagg ggagctcatc cactcgctca aagaccgtgc 300  
aaccgtctaa tctgaagcag tcctcgctgg cattaacgaa gaagagtgtg ctaaaggggg 360  
ctctgatcc ggtggccgga aaaggcatct gctgctgcaa atgatattag gcaagaaaat 420  
caggctgtga agaagcaaaa actagatgat 450

<210> 5293

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-E2

<400> 5293

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gcggccggac gccatcatga tcctgacggt gaagcgcgac aacatctgca gcttcatctc 120

ggagaccaac cccgggcacg tacggtcgtg ggagaccaag gacagccagc tgacgatggt 180  
 ggcggacgac ctgaagccgc gggcggtgct gacgtgcccg gagaagaaga tgatccagca 240  
 ggtggtgttc gccagctacg ggaaccgct ggggatctgc ggcaactaca cgcttggcaa 300  
 ctgccacacg cccaaggcca aggagattgt ggagaatgcg tgcgtgggga agaggagctg 360  
 cgtgctggcc gtgtcgcacg aagtgtacgg cggggacctc aactgcccgg gcaccac 417

<210> 5294  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-015-Q1-E1-E5

<400> 5294

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 tctagaaata aaatactaaa atctgaaaaa caaaaaatca cgaaaaatgg ataaatgatt 180  
 ttgatttcaa ataatttcat ggatttgaaa aggaattcaa aaaaaaaaaat catcaatacg 240  
 aaaaaagctc atgggttttg aaaaaagttc atcaaattga aaaaacacaa aattgaaaag 300  
 gttcatgtgt ttgaaagaag ttcattgact tgaaaaatgt tcattgattt ggcaaaattt 360  
 catgagttca aaanaagttc acttaatttt ganaataagt ttacggattt gaaaaaagtt 420  
 catcgatttg ataaaaa 436

<210> 5295  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-E7

<400> 5295

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 cgacacctac ctgtaactga attaatctg taagggtcga ttgccttgc atgattctaa 120  
 aaacataggg atagggtcatg gaaaaacacc tgaatatgat aggaatgcac atgggaaaca 180

tcgcatttgt gaacacagga tttctgtcaa cttgggtggt tgcttcacac gaattggagg 240  
agcagaggaa tgcacataag catggccaca ctagagtga accatatgaa agcgtgtata 300  
tggaaaaaaa tcagcgggtca ttcacacgaa acacggccgc tcttcaggat ccaagcttac 360  
ttactcgtgc atgctacgtc aaagctcttc gat 393

<210> 5296  
<211> 322  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-015-Q1-E1-F10  
<400> 5296

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tggttcgggt gcggtgtgag gctgccgtcg ccgcagggcc tggccagcgg tgggaatagt 120  
angggcgggt aggcctccgc ggcagcacag ccggccatgg gaggcaggag catgcgacac 180  
gaccggcgct gctttgggtg gctggagcaa gaagaccaga ggttgaagaa gcaactacggc 240  
cgttggatgg acatcgtagc gtcactggag ctagaatcat tcatattgac taagttgata 300  
aagcccttca tccccatcaa ct 322

<210> 5297  
<211> 339  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-015-Q1-E1-G12  
<400> 5297

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aagagagaac attcaaggag tggattgttt ggaaattaaa accttcagat ttcttagaag 120  
tgaggttgct ttccaactac aattatagct tcaacttgat ttatgtgaat ataagcgtaa 180  
gatgtctagt ggcaatgcta caaaatcatt gcaggcgtga ctcgtagta tccggattgc 240  
actgctgctg gccgtttctt gcaactgcgc acaacaggct tctgacaaag ccaagtctta 300  
gactcatgag gtcccttttt tcagccaaac tgaaagcac 339



<210> 5298  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-G4  
  
 <400> 5298

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 ctaccaatct atccccctac gagcatgcgc gtagtgcttt ggtttttgat gacttctaaa 120  
 tttttccaac aagtatatga gttcttttga ctaatgttga gtccatggat tatacgccacc 180  
 ctttcacccc tccattattg ctagcctctc ttgtatcgtg caacttttcgc cggtagcata 240  
 caccacccat ataccttcct caaaacagcc accataccta cctattatgg catttccata 300  
 tccattctga gatataattgc catgcaactt tccatcgctc catttattat gacacctttc 360  
 atcattgtca tattgctctt tgcatgatca tgtagttgtc atcgtatttg tggcaaagca 420  
 ccatcataat cttcatacat ttgc 444

<210> 5299  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-G7  
  
 <400> 5299

ggtaccgatc tagaattccc gggccgacgg gcgccgttta ggaatcgccg gcataggcgt 60  
 acggaattcg agtagatgca cgcagctaac gatccgatct ggcccgaccc atttaaacag 120  
 ccagtcgctc tcggtttttag gtttgggact tttctaaaat ttcttgaaca agtttttctg 180  
 ctttacttct ttattgtttt ttatttcctt ttttcctttt tcttttccgt ttcatTTTTT 240  
 cttttttctt tttctgtttc ttttctgctt tattttttat tatttattta tttattaaca 300  
 tttcgtcttc cttttctttt ttatttctca agtccattta ttttcaaact tgaacaaaaa 360  
 tttcaatttt tctttggaat tccaaatatg ttctcgtcct caaaat 406

<210> 5300  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-H5

<400> 5300

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catatgacaa aatctatata tgctgctgct atgagaataa tcatgatgcc ttcattgtccg 120  
tattttatatt ttatcgacgc ctctacctct aaacatgaag acatattttt tgttatcggc 180  
ttttcgcttg aggacaagcg aggtctaagc ttgggggagtg tgatacgtcc attttgcatc 240  
atgcttttat atcgacattt attgcattat gggctgttat ttcacgggat gtcacaatac 300  
ttatggctat tctctcttat ttacaagat ttacataagg agggagaatg ccggcagctg 360  
gagttctagg ctggaaaagg agcaaatatt agagacctat tctgcgcaac tccaaaagtc 420  
ctgaaactcc acggaatatc aaaa 444

<210> 5301

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-H7

<400> 5301

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ggtcagccgc cggaggagga ggccgggggag acggagaagg aggtgtgggc gaggttctac 120  
ggcgccggct tctggaggag ccctcgtcgc ctccggcgacg agaacagatg atcgggacag 180  
gccggcggct cctgcatgca tgcgacgcc tggcttcttc tacggctttc ttgattcttg 240  
ctcgggtagg cttccttcgt tttcctcggg gggaaaccga ttagaggag gaaatgggaa 300  
gcttgtgtgt cgtgtttgat ccacaccgca ttcttgttcc accttgatc cgctcttttt 360  
tcttcttttc tttctggtgt acgtcttctt tgttgccatt gtatgcaact aaatgtatat 420  
accgagtaat gtgattgggg aaaa 444

<210> 5302

<211> 484

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-016-Q1-E1-A4

<400> 5302

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tagtatgttc ttatatccaa tcattgcatg aaagttgcat gatctttgat ttcagaatta 120  
tttatttcat cttctttata gaatgttcag ttctgaactt gtgaactttc cttacgtaag 180  
cgtgcgtgtg caactcaatt gtaatcttag gaattttctt gttcattcta gttagcaatc 240  
atatatgaac gaagttatga ataagatgtg cacacaactt gaacatgcgg cttttcgta 300  
ttacaattgt gatcgacccc tctgtctatt attgagatgg cccgataaga tcaccaactg 360  
tagatgtcaa gacttaatac ccacaataag cgctgctagt gaaaaagatg cccataccag 420  
tacaacatag atogaagctc ttcaacaaac ataactcgat aatttcatta acattggctt 480  
acat 484

<210> 5303

<211> 477

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B5

<400> 5303

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ttaaactttg tggccaacac caatacgcaa aacaatagtc agtgtcagaa ggaaaagcca 120  
ccccgacttg gcgggcccac gttcaacctt gaggcgatga tgaaccagcc ttgcccacaaag 180  
cacggtatgc aagagaagcc ggtcagtcac ctatggaagg attgcttcat cttgagggcg 240  
tatagaaact ccaatttttt ccagaacaat cacggcccga atggcggacc aggatccagc 300  
tctcacgggc ctggcttttg tggaggcggc tcaagttctg gtttccaggg ccatggcaat 360  
caagggtggtt taagtcagca gtatgggttaa gggaatcaac aggagcaatc tggttattag 420  
agtaacctga agcagctaaa tagtggacca tatcatgtgt tcaccacgag tttatgc 477

<210> 5304

<211> 216

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B6

<400> 5304

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aaaaaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa aaaccaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaccggc cgcccaaaag gatcaaacct aacttacct tgcattgcaac 180  
ttcaaacccc ttcaaaagt ccacaaaat ccaatt 216

<210> 5305

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B7

<400> 5305

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ttaactctag gcattgcatt actatatcat ggtgaactat tctttgaaga attttagga 120  
ggtactagaa aagtatgact tgatgagga tgccttgatt ttaaagaaca gcctgaaaga 180  
atttagttta gtaaaatatt gtatagcctt ctcgtaaaag ttgatacac tttttcaaga 240  
aaacgaactt tggtaataca ttaagctata actttttotca tttttgaaca acaagggttat 300  
ttgagctctg ctaaaaagt ggcaatgtta aaaaaagggt tttttgtgt aatttttgca 360  
aactttgttg aaagaagcta caaataattg atttgcgtgt caagtctaca gtccaatgtt 420  
aatctacagg gtggaatctt caaac 445

<210> 5306

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C3

<400> 5306

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ctgaaatgtg cgcacgggat ccacactgcc tgcattcacac ctctgatgcg cgtggagccc 120  
ccaggccagg tgtgcaaac gccagccgcc tagggtagga catgagccag ccatgcctat 180

gttcgtccac attgatccaa ccatggaatg gatttacacg ggctctcact caaatcccag 240  
 gtgcatgaca gctagcgaaa tagctagcta cgatcaattg atccatgcgt tagatacacg 300  
 cgtgatcaca cagttgcgca gtgccatgat catgtccggc cacaatcagg ccacatatta 360  
 tgcaacctgc tagataccta cggcattgac ctcacatata gctcgaggag cactctgtat 420  
 cacatatacc agatacactc atacatgca 449

<210> 5307  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-C5  
 <400> 5307

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 agcaaggagc agaagaaact caagcagaga ggaggaaaga caggaggcag gagatttgaa 120  
 gtaaagagta aactgaagag caagagaaga tgaaaatgta tgcgcatctt tggaagagat 180  
 tttgccagtt tagttcgttt tttcggttca tggtgaaatt ttcaccggag aagaaacatg 240  
 ccttggtgcca gtgtagcttt gcgtagttta gtgcgaggcg gttttcatgt tcacacgaaa 300  
 atgaaatctt ggcgcgccat tttatcttgt gtgtcattcg aaacaaaaaa tagaagggat 360  
 cttgtgtgtc attcg 375

<210> 5308  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-C8  
 <400> 5308

ccgggtcgac ggggacagta aacttattat cacgagcga agccttaagc atggcctcga 60  
 catgctacag agcatccata gtgataacaa gagctcaaaa aaatcgctaa aggatgttgc 120  
 cacagagaac gagtttgaga aaaggcttct ggcagatgtt ataccaccga atgatattgg 180  
 agtcaccttt gatgatattg gtgcgttgga gaatgtaaag gaaacattga aggagttggt 240  
 gatgctccca ctgcaaaggc cggaattgtt ctgcaaaggg cagttaacga agccttgcaa 300

gggaatattg ctcttcggcc cccctggcac tgggaaaact atgcttgcta aagcagtagc 360  
aactgaagca ggcgcccaact tcatcaatat atcaatgtca agcattacat cgaagtgggt 420  
tggcgaaggg gagaaatatg tgaatgctgt tttttca 457

<210> 5309  
<211> 343  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-D5  
<400> 5309

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agagagagag agagatcaaa cacatagcta ctggtacata ccctcagccc cgagggtgaa 120  
ctactccctg ctcgttatgg agagcgctgg gatgatgaag atggccaccg gtgagggatc 180  
cccccttcgg cagggtgccg gaacagggtc ccaattgggt tttgggtggct acagaggatt 240  
gcggcggcgg aactccgat ctaggttatt ttctggaagt ttgggtatat ataagagggtg 300  
tttgctcgg gaacaagtca ggggggtctt cgaggcgccc acg 343

<210> 5310  
<211> 478  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-E7  
<400> 5310

tccggaattc ccgggtggcc gggagaattg ttgatcatga gatgacactc aaggataaga 60  
agagctccac aacaattcaa gtggttctta caaagcttca tgtgatgctc ctacagcatc 120  
aagtgagaat taagtctcga atgaagaatt gagcttaatg tgaagaactt caacaagttc 180  
tacaagaata gaagcaaaga gagaagttgc aagtcaaggt cctaaaatga caaaagatct 240  
tctagtcgtg atcgtaattg ctacaattgt ggaagacccg gacactactc caatgagtgt 300  
acgactccct acaagaaaat ataagattca ccaaaaagga ggagtagaag agatgaatca 360  
cctccaagag agaggagtag agatgatggg tatgagcgaa taccctctca tagaagcaag 420  
gattcagaaa ggaaggacaa gtcatcaaag agctacacaa ggccaagact gcaagctc 478

<210> 5311  
 <211> 473  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-F1

<400> 5311

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ccaacgacca gaccacgacc gcttacggat ccctaccttt atcaatacct catatatact  120
cgcaatattc agattgcttt tatcaaattc atgcttggtc atcgattggt tgcaggaata  180
gaccttcgtg gtcaggttga ttgtgctccg gtgtgggtcaa taacctctca gagttggttt  240
agcgattgct aaagcgcaac gtcgtgcacg tttgtagtca gatcgtaaaa gtcattcttca  300
ccaaatccat agttatcatc tcatcgaaag atcgggacac cccgcctcta tcatgtggta  360
tcagttttca ggttgctcgg tgagaatttc cagttttcct acattagatt tattttctta  420
cctattgtcc aataaattgc catacacaca atcagttaga tctgttcac ctt          473

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<210> 5312  
 <211> 489  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-F5

<400> 5312

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tacaggtccg aaattcccgg ggcgccgggg caaagtacta aacaccgcag acaaatacag   60
cgacagtcgc cacacataag agctatccga agcgaaaatt actactataa tttgatgagg  120
aggccttaga gccccgcgaa tcaaagaata aggaaaacac ccggtcgggt aaacaaccct  180
acggccaaca tatagcagca atgggcatcg tactcaagcc ggcacgcgat ccgcacaagg  240
actcgcatca aaaagacagc ccagccagat ctatctacgg gccaagaaag caagctctag  300
taagcaatgc aacgcaacaa gtatccgaac atcacggcac acccaaatac aggggtgccg  360
cacaccccct atgtttcacc gatgaggtgc tggaccatga atctccaccg ggattcaaac  420
ccgtaaacad agaggcatat gacggaacaa cagaccctgg agtctggatt gaggattata  480
tcctccaca                                     489

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<210> 5313  
 <211> 474  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-G5

<400> 5313

tacagggtccg tacttcccgg gtcgccgggg ggagaatgga agcacgggag cgtccccctc 60  
 cccggcgctc ettcttctcc tccggggctc accaccgccg tggcgctca tgccggcgcc 120  
 ccactcacga cacgggagcg actctgccgc gcagagcgct cacctcctta tcttgtgtgc 180  
 cgaggcttgc tcgtctatctt tcctttttac ccaggcccaa tagaaagtaa cggcccaagc 240  
 gttaacggaa gaacgtagac caagcccgtg agcgaaagaa cgttgtaata aggaattttg 300  
 acaaaaatct ttagtgcgta ccccaaatta gtaccacctc gtttatatta cgattttatc 360  
 tatataaatt gtaaaagcgt attatgacat gagaagaaag cgtattgtga cgggtgaaccc 420  
 gacaaagtca atccgtgctt tattattagg gagagataaa tggatgcagt tttc 474

<210> 5314  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-A1

<400> 5314

taccggtcca gaattcacgg gtcgacgggt agtacacacg acaacatcca agtttggtat 60  
 aataaaaact atcataggaa gtgaattgga tgctatgac aagttgatgc ttgataattg 120  
 ttttgagata tggagggtgg gatattagag tcatgctagt tgggtaattg tgaatttaaa 180  
 gaatacttgt gttgaagttg gcaagcccca tagcatgcac ttacggtaac cgttgtgtaa 240  
 caaatttgaa acatgaggtg ttcttagatt gtcacacctt tgagtggcgg tcggggacga 300  
 gcactgggtc tttcctagca atctatcccc ctaggagcat gcgcgtagtg cttgattttt 360  
 gatgacttgt agatttttgc aataagtata tgagttcttt atgactaatg 410

<210> 5315  
 <211> 311  
 <212> DNA





ggggtcgccgg gggaaggcga aatcttttct ggctgataga taaaaatccc caccacatcc 60  
 gcaagcgcgga actccctccc cg gatctgca actagccggc ttccctcccg atccgtctcg 120  
 ccgcgggccga gatccttcct tctccggcg agagccaaga tgtactcgtg ggagatgctg 180  
 tcgttcaaca tccacgacgg gttcctggag gcgatcgtgc gggggaaccg ctcgggcctc 240  
 ctcacccaag ccgattacaa caacctctgc cagtgcgaga ccctcgacga catcaagatg 300  
 cacctctccg ccaccgagta cgggccatac ctccagaacg aaccttctcc cttgcacacg 360  
 acaacaattg tggagaagtg cactctcaag ctggttgatg aatacagaca catgttgatg 420  
 caggcgaatg aacctctatc tacattccta cagtacataa cgtatggaca catgatcgat 480

<210> 5318  
 <211> 474  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-B12

<400> 5318

gtccggactt cncgggtgga cgggatatat taaaaataa taatttagta ctccctctgt 60  
 cctaaaataa gtgactcaac tttatattaa ttttatgaga aaaaatcacc atatattaga 120  
 aaaggttgag tatgtattat gaaaatgttc atcacataat aaaagagctc accgtatata 180  
 aaacgatcag taaatataaa gaatatgtat attaataata tattcggccg gtgttcggaa 240  
 aatattgatc gcatatttaa aattgtactt aataaactat atgaatgaaa aagtgcaaag 300  
 taaaaaccaa aaagacaaac aatgtgaaac ccagacatga aagaaagaga aaaaccact 360  
 aacactgtgt attaaaaaag gcaaaagaaa aaataaaagg gaaaataaag aaataaaata 420  
 agacataaat agaaatctac acataaacat aaaaccggaa ctaaattgga acag 474

<210> 5319  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-B2

<400> 5319

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 aggaagagag gccacgcctt gctgtatgcc gattactttt ccaacanacc gctcttcaag 120  
 ccggataaat tctgacgcca ttttcgaatg ggaaggcatg tgttcaatcg tatctgagag 180  
 ggagtgggtg ctcatgaccc atacttcgag tacaagaggg atgtccttgg caagcttggg 240  
 ttctcctctt accagaaatg cactgcggcc gtccgcatgc ttgcctatgg aattccaggc 300  
 aatttgggtg atgacgacgt gcgtatgagt gagacaacat gtctgatgtc aatgtacaag 360  
 ttctgtcagg ctatgatcga ggtgtttggt ccagagtact tgaggcagcc aactgccgct 420  
 gatac 425

<210> 5320  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-B6  
 <400> 5320

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 gtgtttggcg agctcggcaa gagagccgca gagagcaggg aggaaagctc tagtgctcaa 120  
 gagaacaacg agcaacagct ggggtgctctc gagagaatca agcgaaggcg tcaatagggt 180  
 cgaagattgt gatccaagca cgccattacc tgtcgtttga gcctaattgat gttgtagctg 240  
 ttacgtgtaa catgttcttg ctacggtttg ctcttcttgt acaatgattt tgcaggagtt 300  
 aatccggtgt ggatccgcag cgtttttctg tgtacaaact gtaaactctt gggacacgtg 360  
 tccatcagtt tcagtgaat tttgtcgatt tcaacgatga acaatggact ggcagctttg 420  
 ttacaaa 427

<210> 5321  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-B8  
 <400> 5321

ggtaccagtc aagaattccc gggtcgacgg gggcggcaaa actccgaggc tggagactcg 60

aggagaacga ataagaagaa atcacgggaa caaaaaggag acgacccttc agtcttattt 120  
 ataaggcaac agagttatat caaacgcacg gatgcaagag ctgcagttaa aagaagggtg 180  
 gatatatgaa aaatgtcata aggacgtcat gcaggttcta caacaaccac aagtgatgac 240  
 atcatgacag ttgaccaagt accagcacat gtcgatgata caagattttg tgacagattg 300  
 acatgaacca tttcagatca cactggggcc taaagttggg gatactacca ctatgtgtaa 360  
 gccggcatac ttggggccggg ttaacttcat tagtaggaca agcagatga 409

<210> 5322  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-C10  
 <400> 5322

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 caaaggcaca agggccacaa aagttggttt ttacttcatg gagcaagaga agcaatgtga 120  
 tgggcctaag gatttttttg atacgctagt agtacaacta tgggctgac catatgtttg 180  
 gcctctgtac gccaaaggcgt tcgagagatc aacagataag gcagcgtcca tacttaataa 240  
 atagttattt agattagagt ttagactcgg gttttattgt actccctccg tccggaaata 300  
 cttgtcatca aaatggatac caggagatgt atctagacct actttagttt tagatacatc 360  
 ccttttttagc aaggtttgat gacaggtact tccggacgg 399

<210> 5323  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-C6  
 <400> 5323

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 tgggtgaatt gttacaacct ggaggctacc tgaaattgat ggaattgggt ctgcaggact 120  
 gcgttgatga aattgatgca cagcgtgtcc ttggttatgc attattcaaa gatgggaaga 180  
 acacaaaact ttcttacccc ttggagaagt tccattcaga tgtggctggc aggagctttc 240

acaatggacg gttcatacag aggatgagag aaaaggttgc atctttgccc aatgtccaac 300  
 tggagcaagg aacagttaca tctttgcttg aagaaaatgg tacagttaag ggtgtgcaat 360  
 acaagatcaa gtcaggtgaa gaactaaaag cttatgcacc attgacaatt gtatgcatg 420  
 gctgcttttc aaacttaaga cgtgcccttt gctctccaa 459

<210> 5324  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-C7  
 <400> 5324

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 ttatcttcat atagatgaat taatttagcc catatataat atccacctaa taatcagata 120  
 tttggataat aataataaac agctggttac cagcagctct tgccatgata cttaaggcac 180  
 aaacagtttc tacaacttcc aatgttatca ctatgcataa tattttgttg acagaaaatt 240  
 cactcccctg cagattggct gcaaacaaca aaaatatgct gacaagttgg ccaacttacc 300  
 aatgcatcag ttttcgtact tgtcttgaaa tctgctaggg tttgtagtct ggctagtatt 360  
 cctgaacgtt tgccagtctt caaatttgca cggacctttc at 402

<210> 5325  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-D1  
 <400> 5325

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 ataagatttc ctgttgagtt ttgtgttggt aagtttacaa gttttgggtt aagctttgaa 120  
 ggactacgga atacagtggc gagagcctaa gcgtggggat gcccatggca cccacgaga 180  
 tactacgagt agcaaaagcc taagcttggg gatgcccacaa gaacagcatc ccctctttcg 240  
 tcttcgttca tggggaactt tacttaaagc tatattttta cacgccacat cataagtatt 300  
 tttctgcag cgtcacgtac tacatcaatc ttaacttttt aatataccac aatcatcctt 360

tctgtacaca ccttttga

378

<210> 5326  
<211> 303  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-D2  
  
<400> 5326

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ttcatctcct tctgcaacgc caaccccgga ctcataaagg acgtcggcaa agtcttctga 120  
gtcagttcat ttcacctcag ccgtccgatc caggagccga ttcattctac tagggcctcg 180  
tatatcaatt tcatgcaact acctactccg gtcccgatcc agcctcagct tcagctgagg 240  
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ttc 303

<210> 5327  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-017-Q1-E1-D5  
  
<400> 5327

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taagcggggc ttataaggat ttcctgttga gttttgtgtt gtgaagttga catgttttgg 120  
gttaagcttt gaaggactat ggaatagact ggcgagagcc taagcgtggg gatgcccatg 180  
gcacccaag agattctacg atangcaaaa gcctaagctt ggggatgccc caagaacagc 240  
atcccccttt tcgtcttcgt tcatggtgaa ctttacttga agctatattt ttacacgcca 300  
catgataagt gtttttcttg gagcgtcacg tactacatta atcttatctt tataatatac 360  
cacaatcatc ctttctgtac acaccttttg agataagccc acatgat 407

<210> 5328  
<211> 437  
<212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-017-Q1-E1-D6

<400>      5328

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ggtgacgggt tcategactt cagcgagttc atctccttct gcaacgcaa ccccggggtc  120
atgaaggacg tcgccaagggt cttctgaatc agttcatttc acctcagccg tccgatccag  180
gagccgatcc atctacgtac ggcttcgtat atcaatttca tgcaactacc tactccggtc  240
ccgatccagc ctcagcttca cctgaggccg gccctaattt tgtttgatca tttttttgct  300
accagtagta actagtgatg atcactgttc catcatttat ttattttata tcatcacaag  360
tttcttttct ttctctacct tttgtcgat cgtcggtcc agctcgatcc aacgattcat  420
gctgctaatt gtttgtg                                     437
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<210>      5329

<211>      451

<212>      DNA

<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB104-017-Q1-E1-D7

<400>      5329

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gcattgtgaa caagttcttg aaggagagg ttggcccaa aaccgtccat gttccatcag  120
gggagaagct tgctgttttt gatgctgcta tgaaatacaa gaatgaaggg catgacacta  180
tcacctctggc tgggtctgag tatggcagtg gaagctcaaa ggattgggct gcaaagggtc  240
caatgcttca cggagtgaac gccgtgatag ccaacagttt tgacaggatt caccgtagca  300
atcatgctgg aatgggcatc gtccctctat gttcaaggc tggcgaggat gccgacagtc  360
ttggcttaac tggccatgag ncgttacacc atccagcttc cgactgatgt gaatgaaatc  420
aagcctggcc aagatgttac agtcacaacc g                                     451
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<210>      5330

<211>      440

<212>      DNA

<213>      *Triticum aestivum*

<223> Clone ID: LIB104-017-Q1-E1-D8

<400> 5330

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caggctctgc gcgtccattg tgcggagctg cctcaaggag ccctacaagt ccgaggccgc 120  
cgaagtcgag aaggtccact actcccgtc caagtggacc gacggaaagc agcccaagcc 180  
caccatctgc gaagatgata aatgaaagat ccggtgccat ggtgacagag tccttcctac 240  
ggacgttttc aaaagctact gtgtttcgtg ctggccattc tacctaaaac tcgttatctg 300  
ttacatttat gtttcacgct caagaataaa ttatttacgt gacattggat ctgttccgac 360  
accattttat ttttaactttt aatcgctcct tctctaaaaa gaaaagaagt ggaagaaatc 420  
aaaacaaaaa agcggccgct 440

<210> 5331

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-E1

<400> 5331

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gtcagatcag ttctacgttg aaggagaata ggggaagaa gtttatcttc cgtgttaagt 120  
cacagcccct ccaaccagac gtageccctt ggcagaaggg tgaactggtc taccaaatat 180  
atctgtctcc atcaagcacc attggttcta tttactctac tgcatttcca tcagcagttt 240  
attttcgtgc tctgtgccga tagttttttc gattatttca ttcaggttgt tatcaacttg 300  
tgtttcaatg ttcacctgt ttcactgttt tcgtctgtat tcatgtgtta tcatcttgtc 360  
cctaagattc acctgtgaaa tccttcata cattgctatg tctcattcta ctacattttt 420  
ttgcatgttg c 431

<210> 5332

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-E5



<400> 5332

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gctggcgcg c taagccatta tgcattgaat tccgatgacc atcgcgctac cttcccccta 120  
taagtactgt ttcccagcct tctccagtgc caccgtgacc caactcgcca taccctcata 180  
agccccacc ggctcgatgt cgctcgccac gtacgccatg cccccgccc tccacagtag 240  
gcgacgcaa aggcggtcac tgccggaact agtggttggg ttttctactgg aaggcagacg 300  
gagggaggag gcattctatc tgtctttaga tggcaatgcg tagaccgagg agttgttgga 360  
gcgcgaccgc atggcgagg agcaggagtt gttggagcgc gaccgcctgg cgga 414

<210> 5333

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-F1

<400> 5333

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gttgtctgac ggtggttgta tatcaatctt tgcttgctaa acttccgagt tccactgggt 120  
cacgtttcat gcacatgtag tcggtgggga attacttacc atcatctact agtgagcctt 180  
gattacagca tatgtttcgc gacgtacggt ctccaaatag atgcagctcc ctactatcag 240  
gtagcggcaa ctgagtttac atcaggcggt cagttacca tcagttattg ggtgctgata 300  
acctgacatc tggatctcac gcaggataat aatgcgtagg gtgaccctga gacaatattc 360  
ccctggat 368

<210> 5334

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-F3

<400> 5334

gggtcgacgg ggattccaat ttccattaag gaaaggcatg gaacactttc ctagaaagaa 60  
aattaaatta ctttatgaat ctattatgag atccacttat ggattgcata ccaaaaatga 120

caatacctag atctattctt gtttttatgc ctagctaggg gcgttaaacg atagcgcttg 180  
 ttgggaggca acccaatttt attttcgttt cttgtttttt gttcccgttt agcaataaat 240  
 ggttcatcta gtctatgttt ggatgtggtt ttatgtttta attggttttt gtgccaagta 300  
 gaaccttcgg gaagacttgg gggaagtctt tgcgggtctg ctgtaaaaaa cagaaacttt 360  
 agtgctcaca agattttatg ccatttttta ctaaagagtg ccattagggt gattaatttt 420  
 aagatgat 428

<210> 5335  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-F4  
 <400> 5335

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 agaacgatcc gggtattgac cggcatcgat ctgtcaggca acctcttgtc tcagtgcac 120  
 cctgacgagc taaccaacct ttacggcctc cgattttctga acctgtcaag aaatcatctg 180  
 tcatgcggca tccctggaga tgctggtagt ttgaagaatc tcgagtttct tgatctatca 240  
 tgtaatgagc tttcaggaca cattccacag agcatctcgt tcttgtcaac gctcagcata 300  
 ttcaacatct ccaacaatca tttgtcaggc angatacctg gtgggagcca gatgcagacg 360  
 ttgactgaac cttcgtttta ccggaacaat tccggccttt ggggatttcc tctagccgat 420  
 tgtccaacta 430

<210> 5336  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-F6  
 <400> 5336

aattcccggg tcgacggggg tgccctaccag cctcatcatg catgggtcttc gaagaagggt 60  
 catcctcacg gccagggtgta tgggtatagg aactccctct gggcagaaca ccttggtatg 120

gttgatgacc acttcaagga accttctagc ctggactgtg taagattagt gaaccaaata 180  
gccgaagaaa actgggaaag attcgcgtca gaagagatga aaacgttgca agggcacctc 240  
ctcagatacc cagtgaaggt agagcccgat ggtaagattg tcccgctgcc cgaccaagaa 300  
tgcttccccg acgttggcgg caagatctgc ggcgctccga cctcgcttcc tgattcgctg 360  
acgatgtagc atcacagtac tgacttctct tcagggtcca atctggttcg tttgct 416

<210> 5337  
<211> 466  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-017-Q1-E1-F9  
<400> 5337

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atgtaaatacc aaggacaacc aaaagcctaa gcttgggtat gcccggaag gcatcccctc 120  
tttcgtcttc gtctatcggg aactttactt gaggctatat ttttattcac cacatgatat 180  
gtgttttgct tggagcgtct tgtatgattt gagtatttgc tttttagttt accacgatca 240  
tccttgctgt acacacattt tgggggagac acgcatgagt cggaatttat ttgaatactc 300  
tatgtgcttc acttatactt tttgagctag acaatattgc tctagtgtt cacttatatc 360  
tttttagagc atgggtgggtg ttttatttta taaaattat ttatctctca tgcttcactt 420  
atattacttt gagagtcttt tagaacatca tggtaatttg ctttgg 466

<210> 5338  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-017-Q1-E1-G1  
<400> 5338

gggtcgaggg gtcataccaa ggctaaggag tgatgtggtg caatgtcttg tcagtttcga 60  
gctgggtgttc ccatcatcct gcttcaatat catgacgcac gtcctagtgc atctagttaga 120  
cgagattgtc attctgggcc ccgtatttct acacaatatg tacccttttg agaggttcat 180  
gggagtccta aagaaatatg tccgtaaccg cgctaggcca gaaggaagca tctccatggg 240

ccatcgaaca gaggatgcca tcgggttttg tgttgacttc attcctggcc ttaagaagat 300  
 aggtctccct aaatcgtggt atgaggggag actgactgga aaaggcacgc ttggaaggga 360  
 ctcaataata tgcagggacg gatattcttg gtctcaagca cactacacag ttctacagaa 420  
 ctctaccttg gtgaccc 437

<210> 5339  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-G3  
 <400> 5339

gggtcgaggc gataaactca tgcaatatga tcaaaacccc atctttttat cctcgatggc 60  
 aacaatacaa tacgtgtcgt ttcccctgct gtcactggga tcgagcacgc caagattgaa 120  
 cccaaagcta agcacttctc acattgcaag aaagatcaat ctagtaggcc aaaccaaact 180  
 gataattcga agagacttgc aaagataacc aatcatacag aaaagaattc agaggagatt 240  
 caaatattgt tcatagataa actcgatcat aaaccacaa ttcacggat ctgcacaaac 300  
 acaccgcaa aaaagattac atcgaataga tctccaagag aatcgaggag aactttgtat 360  
 tgagattcaa agagagagaa gaagcatcta gctaataact atggacccg 409

<210> 5340  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-G7  
 <400> 5340

attcccgggt cgacgggcac aggcacgagc cttcaccatg gaaaagactg agacgggaga 60  
 cgtgtaggtg cccatacact tctcaatgtc ccatcaccag gctcggaact gggactgctg 120  
 tccattcaag aaatcagtgc gtccagctcc taacagtctg gcattctcgt gatgctacat 180  
 tacatgtagc aatgtcaatt tatatagtta tgcagacgat tcgttatgat aaatcccccg 240  
 cgagaccaa atgcgatacg gacacgcgag atgatacgcg cttacatgat cgatcataca 300  
 acatgcagtc tctgcaatac atgtcattct ggtgtccgtt ac 342

<210> 5341  
 <211> 82  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-G9

<400> 5341

ggatcacta taatgagtcg tattaggtga cgtacgttct tacccttaag ttcgggtact 60  
 ctctgcagtg gcataaccat gt 82

<210> 5342  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-H1

<400> 5342

gggtcgacgg ggctattggt cagcttgcaa ggctcctgtg ggaagctgag aagtcggggc 60  
 actaccagta cttcctctgt gtcactggag accactctac tcctgttgag tacggagacc 120  
 acagctttga acctgtcccg tttgcaatat gccgtctgag agatttcgtg ggagcgattg 180  
 gggagggcaa tgtgatgaat accccccttg acgatttccc gctgcctttg gttaaaccg 240  
 gagaagattt aactgatgat tcagaaccag cggaacacaa gcttggggag cgtaaagctt 300  
 ttagcggcga tacagtgtgt gaatacccg agattgctgc tgcaaggggc tgccttgggc 360  
 ggttccctgg aagtgagatg atgggcatca tcaagaagtt catgaaagca aagaacgatt 420  
 aacgcc 426

<210> 5343  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-H11

<400> 5343

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 gctaactctg atatttctat tagcatgttt gagttttgca tgtagtctag tctagtgtgg 120

tggttcgtccg acgaaggctt caggtgagcg cgccaatgag gtgagatgcc aggatgccgt 180  
 gtgaggcggc gagcacggcg agatgccgat ggtgctgcgt gagaagcggc aagacgtatc 240  
 agaggcaact cgacgtagaa gaaggagcgg cgctgcgagg aggcggcgcc aacaattggc 300  
 atcagagcct tgatgatccg cggaagcgat ggcagcgacg acgacgcggc ggactccatg 360  
 ttaagtggaa gacgtcggca cgatgtgggt ggccgtcggc ggcgcgatgc taccggtggc 420  
 cggttgcggt gtgatccgc tagattatgg cggtcg 456

<210> 5344  
 <211> 467  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-H7

<400> 5344

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 gccggagcag gtgaggagc aagagcttca tcggccggtg caggcaccat gacccatcgg 120  
 cagcgatatc agcgtcacag tccttgggag cacaatcgac atattgcaga ggaggtgtga 180  
 taagcagttt gccatccacc gtgcaaaaga tccagagctg ctcgggcgga tgatcgacga 240  
 cccacccgaa gagacaccct caccagtgtc catcgagagc ctgatgcccc acaaggaatg 300  
 ggcagaggac ctctgcgatt cagtcaagat aaaggcagcc tacggcttca tcattgcccc 360  
 cggcgtccgt gtcaacctcg attctgatga tgtggtggcc aagctcgagc gcatecttgg 420  
 cggagttgac gtccctgacg aagtagaaca tccccaacgt tataacc 467

<210> 5345  
 <211> 314  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-A11

<400> 5345

ccctagagtg agtcgtatta cgtgcacgtt tgtagtcgga tcgtcaaagt catcttcacc 60  
 aaatcgatag ttatcatctc atcgaaagat cgggacaccc ccgcctctat caagtggat 120  
 cagttttcag gttgctcggg gagaatttcg agttttccta gattagattt attttcttac 180

ctattgtcca agaagatgcc acaaagaaga gttagatcta ttcattccttg gtccaagcca 240  
gtctgagcct ttgcaatttt cttttcattg cttgcatagt tgatttatcg gttgcatcgt 300  
cgtgtccaat tgct 314

<210> 5346  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-018-Q1-E1-A6  
  
<400> 5346

taccgatcca gaattcgagg gtcgacagct cctctacga cggggattgc aaatgcatgg 60  
ccgcagtctc caagatcctt tcatcgtacc ctgggccagc cagacgcctt gacatccgca 120  
tggttcattac caactgcaag gtctaagcca agtacggcga gtgggttctta tcgccctccc 180  
ttgatcaact cgaggagctc agctttgaag ctggatgatg tcgctctctg ccgccatccg 240  
cgctccgcct cagcccaacg ctgcaccgag ccagcttcag ctcttgctat cttcnccagc 300  
cgcgcctgtc cttctttctc ctcaactcaa gcagctcgac ctcttcgaca ttggcatctc 360  
gaagcaggct atggagcacc tgctccgcaa ctgtactatg 400

<210> 5347  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-018-Q1-E1-A7  
  
<400> 5347

gacggggtag gttaaaccac aatataaata aataatgagt tcattacagt aacttaaagt 60  
gggtgggttgt tttcttatac taacggagct catgagattt tctgtttaag ttttgtgttg 120  
tgaagttttc aagcttttgg gtaaataatt gatggatttt ggaacaagga gtggccagag 180  
cctgagcttg gggattccca aggcacccca aggtaaaatt caaggacaag caaaggccta 240  
agcttgggga ttctctggaa ggcattccct ctttcgtctt cgtctatcgg taaatttact 300  
tgaggctata tttttattca ccacatgata tatgttttgc ttggagcgtc ttgtatgatt 360

tgagtctttg ctttttagtt taccacaatc atccttgctg tacactcctt ttgg 414

<210> 5348  
 <211> 59  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-B12  
 <400> 5348

gggacaccct atagtgagtc gtattaggag attggcacgg agtacacggg tgagcatgt 59

<210> 5349  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-018-Q1-E1-B2  
 <400> 5349

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 tcaaggcgga ggcgacgacg gacaacaagg ggtggtacaa gatcgagatc gatcaggacc 120  
 accaggacga gatctgagag gtggtgctga ccaagagccc cgacgcgtcg tgcgccgaga 180  
 tcgaggagtt ccgcgaccgc gcgcgcgctn cgctcaccag caacaacggc atgaagcagc 240  
 agggcacccg cttcgccaac cccatcgctt tcttcccca ggcgcgcgc aaggagtgcg 300  
 gcggcatcct ccaggcttac gacctcaagg acgcaccga gaaacccatg aaccccatcc 360  
 catccatata gtctcgctca ggttgcttcc atcatcatca tcatcatcgt ctctcatga 420  
 ctctcctacg tacggtgccc 440

<210> 5350  
 <211> 149  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-B3  
 <400> 5350

gggttcacga cagaagatcg tgtaagttgt tctggtgcca ttcgaaatgg ttcaaaggta 60  
 atggattgag gctgctctga aggatccaca ctgacgtaca cttgcatgcg acctcatagc 120



acctctatag tgtcagctag gattcaatt

149

<210> 5351  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-018-Q1-E1-B5  
  
<400> 5351

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aacgctctta tattatggga cggaggaggat agcatggaac aatcaaaaat tatagatagc 120  
ttggagacgt atcagcatcc ccaagcttaa ttctgctcg tcctcgagta ggtaaagtat 180  
aaagaaacag aatttttaat gtggaatgct gctaacaatg ttcattcacat attcttttct 240  
ttttagcat ggacatatgg acttttatat ggttcaaagc aatagtctag ttttgaaatg 300  
aagatttcaa tactcaagca tatcaacaag caaccatttc tttcagaata tcaacagtaa 360  
agaaagttat ctctagccca tcatgctcaa tcattgatcc attcatgaaa cacactcgca 420  
t 421

<210> 5352  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-018-Q1-E1-B6  
  
<400> 5352

aattcgcggg tcgacggggt catagaatgt caagctcctc tttcagcagc cccagataca 60  
gattgatgtc gttccctggt tggtttggcc cttcaattag cataactcatg tgaatgtact 120  
tcctcttcat gcacaaccag gggggaaggt tgtacatcca cacaacaca ggccaggtgc 180  
tatgtgtgct tctctggctg ccaaattgat tgactccatc ggtgctcgcg cccagcacga 240  
tgttcccttg atcgttccca aattctgggt attcgaagtt caacgcttgc cactggctcg 300  
cactcttacg gtgactcagc atcttgtctt ttttatctat ctccggatca tttgctcaa 360  
cttctcgctt ctccctctcc ctaccgcct gccaacgcag gagctttgct acc 413

<210> 5353  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-018-Q1-E1-B7  
  
 <400> 5353

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 tgataattgt tcttttagtag attgtatttc cttgttgcaa tctgtgttga attctcctca 120  
 tgcttatagt caaaataaag cttttaccaa acatattgtt gatgccttga tgcaatctta 180  
 tgatgaaaaa cttaatttgg aagcttctat acctagaaaa cttaatgatg agtggggaacc 240  
 tactatagag attaaaatta aagatcatga ctgttatgct ttatgtgatt tgggtgctag 300  
 tgtttccaga attcagaaaa ctttatgtga tattcgaggt ttccatgata ttgatgattg 360  
 ctctttaaat ttgcaccttg cggattccac cattaataa 398

<210> 5354  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-018-Q1-E1-B8  
  
 <400> 5354

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 ccctctcgga tccacgggcc ttcttgagag aagctccgat ttgcaaaaag cttataccaa 120  
 agcttgtccc aattcggcca taaaatttac cacaacatgt tggtgccatg tcatgacacc 180  
 atgccaagtt tcatgatttt caagcgtgct ttggatttag atgaattaag aaaccaactc 240  
 aatattttcg gtcgagccat aacgcccaga tgtttgaatt tcattctcat ttcatgcatg 300  
 ggacctagaa attcacctaa ggacacacat gtgatttttc aaccaacttt ggtgcactgg 360  
 agcatgtgct tgtagtttaa atttaaatta tcacattaaa tgacta 406

<210> 5355  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C1

<400> 5355

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caaatggaag gtcttgcttt tgatgccag atggtagatc tcattgtcaa ttttatcaaa 120  
tctttgccca aatagtgtac tgtaactgtg tgaaagtgcg caaagcgtgt agtgatgaac 180  
atcgaaaaca tacgatttgg atagtgcctt catggtttgt attttctcgt gttgtatgtg 240  
tacactgggt gttgtgttcg agatagtaat caaatcttag tttccatttc atatgagttt 300  
tagactcagt gatgcaagcc gcatggaaaa tcttattgtc atcacgacat tgtaatccaa 360  
tcttattatt gtttgtatag ccat 384

<210> 5356

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C10

<400> 5356

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agaacttcaa agtggataca gtaagtcaca acgacaagtc ttttttcgta attaagcatg 120  
acatctgctt catttgcttc aacttatatt ttttactatt ctactagcgt atcccctgcc 180  
atgcaagagt ttttgtattg gataagatag gtttcagtca tagtatggag gaaaagaaag 240  
tttacttgaa gaccgagcat ggttatattt tccatgcgaa gttatacaat tcagacgact 300  
acacctattt tggatgcaaa acatggcgag cactatgcaa gacttatgca attgagccct 360  
gataaggggt atcacccctt gaatatccgt cggaagatg atattgaagg taataccgac 420  
atctgggtca atgtgcaaat 440

<210> 5357

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C5

<400> 5357

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ggcgcgatgcc acgcaggggg cgcacgacac cttgaagaac gccgccggct cgatatacta 120  
gttcgggatcc ggataccggc ccacctgcat attgcatctg ttctgtctgt ctcgatgaatt 180  
gtcatgaagt ggagagatgt tctgatgtag aatttccgtg cgatgtgggt gcgcccggct 240  
tgtagcaciaa ttctttcggc gcctccagat cggggccgtg ttgttgatgc gtaactcgtg 300  
aatctttgac gcaatgagat gcatttcgtc 330

<210> 5358  
<211> 358  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-C6  
<400> 5358

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acggtgggtg aacaaattac tggtgagcaa ttgacagaat tgagcatagt tatgagaata 120  
tctaggtatg atcatgtata taggcatcac gtctgcctcg aaaaaagac ctgctgctgc 180  
cctgttgctt aattataaat gccgttgaag cgatcgagct aagaatcagt gaaagatgac 240  
aataagcaat cttggtacac ctctaaatac gtagtcttta tttgttaacg gtgtccctat 300  
ttatgacctg tcaaccaaag atttgtgtac tctagtaatg tatgtattat atcaccac 358

<210> 5359  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-C7  
<400> 5359

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gtctttttttc gtaattaagc atggcatttg cttcatttgc ttcaacttat aatttaagca 120  
tgacattaag catgacaagt ctttttttac tattctacta gcgtatcccc tgccatgcaa 180  
gagtttttgt attggataag ataggtttca gtcgtactat ggaggaaaag aaattttact 240  
tgaagaccga gcatggttat attttcaatg taaaattata caattcagac gactacacct 300

atTTTggttg caaaacatgg cgagcactat gcaagactta tgcatttgag cctgatatgg 360  
 ttatcacctt tgatattcgt ctaaaagatg atattgaagg taataccgac atc 413

<210> 5360  
 <211> 325  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-C8  
 <400> 5360

gacggggcag tagagttggc ctgaggccag accatataat agatacgggc gtgttctaca 60  
 caggagttct tgtagaacat gttccagtca aacctcgttc ccttcgtctc cggttttcaa 120  
 taccaacacc tgatcatctc gtctcccatc gtttggatgg aatagccaca tggagctgac 180  
 cttcacttta cagagacagg ggcaagccga taattttagt cctccctggg tgtattctgg 240  
 aaatttcagt agaactgaat ccctgtagga gctcactaaa gactctagct aagacctttt 300  
 tgagacgctg ggtgactcgc gtgga 325

<210> 5361  
 <211> 365  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D5  
 <400> 5361

aattcccggtg tcgacgggag gttcaaagga gagaagcgac agagtttagaa gttgtaaata 60  
 tgcattgttg tatcgcgacc tgaatgaaat aaacgaaata atgctcttgt tcacaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 ccggccgccc aaaaggttca agcctaactt acccttcaag gcaagttaaa acccctccaa 240  
 aatttcaacc aaaatcaatt taatggccct ccttttaaaa acttcttaat gggaaaaacc 300  
 ctgcgттаac caaactaaac ccctttgaaa aaaatcccca tttcccaagc gggctaaaaa 360  
 caaaa 365

<210> 5362  
 <211> 345

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-D8  
  
 <400> 5362  
  
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 gcattgagac gcagacaaat ccaattgac gttctatagc actcttactt tttcatcagc 120  
 catcagacca agtggctgga gctgttgaca atcctcgcca ctaaaatctc ataacgagaa 180  
 ccacaaggcc tatgctaaaa actaggttgg ttaatgttgc gaaaattact ggagatggct 240  
 cgtggagatt caaggatcgc ctagtcatat attgtaatca tcatctccgt gaatgcatga 300  
 gcaatcgtga atgtttatcc gatatggtac ggtacgttcc gtttt 345

<210> 5363  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-E10  
  
 <400> 5363  
  
 aattcccggg tcgacgggcg cgttacgaaa gctgaggctt tattacgaga caaagaggaa 60  
 gaaaatgcga tgctgaagca acaattggaa cattatgaga ataaatggtc agaataatgag 120  
 accaagatga aagttatgga agaggcatgg aagaaacagc tctcttctct gcagttgagt 180  
 cttgtggctg ctaagaagag cctagctgct gatgacatgg tcacccgagc agctcggact 240  
 gataccactc caacgcatgc tcaatacgac tctgaagata caatgtccac agggacccat 300  
 acctcagacg ggacagagtt gaaataccag aaccaaattc cctaagctaa aatgggcaac 360  
 gggaaactca aataggcggg ataaatgcgg tgaatcacct atcaaaggag tttgaggaca 420  
 ggcgacaggt attcga 436

<210> 5364  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-E11  
  
 <400> 5364

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aaagtgcagc aaagtatattt tggtttaata gatctgaaaa taaatacaag aaaaagtaga 120  
tcgcaaaggc aaatatatga gaaagagacc cgggcgccat aggtttcact agtggcttct 180  
ctcgagaaaa atagcaaacg gtgggtgaac atcaaatact catgacgata tccaggcaat 240  
gatcatatag gcatcacgtc caagattagt agaccgactc cttcctgcat ctactactat 300  
tactccacac atcgactgct atccagcatg catctaatac aataagttca aggaaaaatt 360  
ggagtattgc attaggaacg atgacatgat gtaacaaga tctatctatg tagagatgga 420  
cccatcggtt ttatccttag 440

<210> 5365  
<211> 349  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-E9  
<400> 5365

tcccgggtcg acggggattt taaccatgat agcgtggctc gccgtgcatt gaaaaataca 60  
tgtctcgctt atcttgcac cctgaatgag cgagatgtca ctgaacttgc attaactgag 120  
tacaagtctg ctacgatcat gaccgagcag tttgctgcat tagcagcatt gtctcaaaat 180  
ccagggtcaag tccgtgagga tgcccttttg gacttctata acaaattggct acaagattat 240  
ttggttgtaa gcaagtgggt tgctcttcaa gctacctcgg acattcctgg aaatgtagtc 300  
catgttcaaa agtgactggc tcaacctgct ttgacatgc cgaatccgg 349

<210> 5366  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-F7  
<400> 5366

acgggctaga ctacggtggt gaggaagggt gtgcctgtct tgcgaagat gagagagggt 60  
gcatgtgtca taaccttttg gtttggataa tttatcattt ttcttataaa attccctctc 120  
attattgaac tacaattagt tacatcatct atctagtaag agacgaatga gttcaacagg 180

aagttagtagc aatatggggcc cttggacatt aatttgcgct agtcatggg caacctcatt 240  
 tgattctcta aagtaatgca cacaattagt actaggaaag tcacaagcta gatggtagca 300  
 atcagccaca accgcagttg caggttccat tgatctccct ctttcttttt ttttgcgga 360  
 ccattgatct cctccatca ttcattgagt ttactagttc aaattatccg aatttacaa 420  
 a 421

<210> 5367  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-G7  
 <400> 5367

gacgggttaa tccacgtcaa tttggaatct acaggacttt ccacaagttc tgctgttaag 60  
 taccaccata atcagtggct gcgttcatgg gcatattcac cagcgcggcg taccgctata 120  
 gctgacagaa agtgtgcttt ctcagcatga agataatata atgggaagga atattgcgtc 180  
 aagaagaacg atcgggtaga gcttatcacg gcaagctaca ggtcgtacct agcagacaag 240  
 cattgtctca tgaaagttaa cttttttag atgtacaaat tgatgtagaa taggtgaatt 300  
 taatttcac tatacatgat caattgcttg ctgtacattt gactaaataa agcaataaat 360  
 cag 363

<210> 5368  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-A10  
 <400> 5368

gtaccggacc taaattcccg ggtcgacggg ggcgacgatg tggatgtgga cgaggcgat 60  
 agaaagctct tagatgatga aaagaaacc gatatcacga aacgaccaca cgctcctatt 120  
 gaagatgagg tggaatgcaa gaagccaaag atagcagaag gctcaagggtg ccaaggagaa 180  
 gaacctgagg ctggagggat aaagaattcc tcctgggtct gatgacaggg gaatgcagta 240  
 aacaccagaa gcatcaaaac tatgatctgg aacagtatcc tgaataaact attttctgga 300



ttatgaatga attctgaagc atgggggctat aagtgaatta tgtaacatgg atttgtaact 360  
atggtggatg ttaaagttaa cgttctatca gtacatcgtg aatgcgtgct gaatatg 417

<210> 5369  
<211> 182  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A11

<400> 5369

attcgcgggt cgacggggga aaaaaataa aaataaaaaa aaaaaaaaaa aaaaaacaaa 60  
aaataaaaaa acaaacaca aaaaaaaaaa aaaaaaaaaa agcgcccact caaaaggatc 120  
gaagcttact tacccttgca tgcaacttca tgccactgca acattgtcac ctaacttcag 180  
tt 182

<210> 5370  
<211> 424  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A2

<400> 5370

ggtccagaaa tcccgggtcg acggggggct gaaagagggtt ttatatcacc ctttctggga 60  
acaactgatg catcagccag atataacctg gacaaaaagg ctttcttctc ttcagcactt 120  
tctttgcgcy tgccagtatc tgaggatttc ttgagtaact gaagtactga ttgcagtgtc 180  
tcaatctttt caggatttat ccctggggag caacgatggt tccagaagtc aacttccttg 240  
tcacggtgcc atgcacttcg tctccttctt gtggacgatg catacaactt cttggtcaga 300  
ttctcacgta tcttgccctt ttgaagcagt gacttccttg cgagtgaaag gttgggtttt 360  
ttggctggtc catccatgga cttcccaatt gctgaacgga atgcggtcaa aagtttttcg 420  
tcaa 424

<210> 5371  
<211> 362  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A5

<400> 5371

gacgggcaaa tcgaaagaac aacaaaggac cgcaagaac ggtcagtcgt cgccgaacgg 60  
gatcatgatac acgagaaata tctatatacg ataataaggt tgtgttattg ccgccatgtc 120  
cgttgacctg atgtttgttt cagctagaga aatcgtaag cccgctcata atttttcgac 180  
gccatggaaa ataataacta ctggtatatac actctataac aaaccggctt gtgaaataaa 240  
tggttgcgcc ccggtttttt gtcgtcaaaa aaaatgaaca aaggagttgt aaaaagccaa 300  
aaacttgcca aagcgcataa tataccaacg ggctgttcta aaggatccaa gcttaagtac 360  
gc 362

<210> 5372

<211> 393

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-019-Q1-E1-A6

<400> 5372

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gaagaagact ctctcccgga ggaggagag aggaagagga aggcttcccc aatangggag 120  
gctgaagggt ccaagagggg gagaactatt ccccggaaca gctctgcca caccaatgtt 180  
ggcgaggagg agtgcccttc aagggccagg cctcctgcga gatcgtaagt atccggatcc 240  
ctgtatatcc taaaatttct ttcgtgccac atagtgcctt tetaatgccg catagtatcc 300  
gcagtccggc cgatgatgat ctecccgctt tttcgagcgg gtcgttgccc ccgtcggatg 360  
tggattcact tccgacggcc tctactcccc gcg 393

<210> 5373

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A8

<400> 5373

gtaccggact agaattcccc ggtcgacggg tgcacgggg gataagtctc gttgcggtgg 60  
aagagaaggt cgtgtgagcg gccccggcaa agaggacgat ggcgctgatg aagcgagatg 120  
acgtgatgca aggctcttgg tccatcgccg tggatgagaa acgtccatct ctagcagtgg 180  
acgacgcggt cttggtaggc gctccagcat ggtggaggat ggtggcgatg gatgtagtgg 240  
aggacggcgg cgatggatgt ggtggaggac ggcggcgatg gatggggtgg cggacgaagg 300  
ctggtgtggg gatggtgttc tagcgcggaat ggtgtatgaa tgggaaaatg gatggacagg 360  
tacggtgaac catgtttttg gacgcacctg tatgaaatat gggaaagtta cgaacttagc 420  
cccc 424

<210> 5374  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-019-Q1-E1-B10  
<400> 5374

taccgatccg aaattcgcg gtcgacgggc acgggtggca agtaacgaaa ccagatagcg 60  
tatgtgaaat taattgaagc gggaccaaac aaagcggacg aaaccaagaa catcacctcc 120  
ctttaatagt aggtatagat ataggtttag agagatgaca ggaattgctc atccacatgg 180  
ttagtcgtaa aatcctacat aaaacttgta gatcactgaa tatgatatgt ttgattcctt 240  
gcaatagatt tgcgatataa aggtggtgat attagagtca tgctagttag tgactatgga 300  
ttagtagaaa tacttgtgtt gaggtttgtg attcccgaac catgcacgta tggatgaaccg 360  
ttatgtgatg aagtcggagc atgacttatt ttttgatttt catcctttgt gtggaggtcg 420  
ggattgtgcg atggttaact cctacca 447

<210> 5375  
<211> 461  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-019-Q1-E1-B11  
<400> 5375

taccgatcct gaattcccc gtcgacgggg ctatggttgg gtttcacgac cttaatgatc 60

tttagtagtt gcggatgctt gctaggggtc caatcataag tgcatatgat ccaggtagag 120  
 aaagtatggt agctcatgcc tctccctcat atagaattgc aagaatgatt accggtactt 180  
 gttatcgatt gcctagggac aaatgacttt cttggtgaca aaatccatct acttttactt 240  
 tcccgaatt tattcatagt tttattctcg caaagtactc gtagtttatt cttgcaaaat 300  
 agttcatact tgttctaggt aaagcagaca tcaagtgtgc gtagagttgt atcgggtggc 360  
 gatagaactt gatggaatat ttgttctgcc tttagctcct cgttgggctc gacactctta 420  
 tttatcaaag aaggctacaa aagatcccct atacttgtgg g 461

<210> 5376  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-B12  
 <400> 5376

gtaccggtcc taaattcccg ggtcgacggg gacttccttt ctcaccacag aattactgac 60  
 aagtgcagc agatggcacg ataaaagact ggtgattatt atccatttcg tagggctagt 120  
 acgaggggaat gggagatccc gtcgtgttta gctctcactg tgctgccctc gacatatctt 180  
 gtttttggag atctcccttg tcatttatac cttagatcaa ttttgtttgg tgaattgaga 240  
 tgttgcttgt tcgagtaaat acgatgacac acttctgaca cttccatctt acaatgggaa 300  
 ttgagctgtt gcttgtaaaa ctttgttcca tggaacaaat gtaactgtgt tccatgttac 360  
 aatgggagtt gagctgttgc ttgcaaaaaa cattaactcc acaatgagaa caacactctt 420  
 aattaacaaa aaaagctaca aaatattccc caatacc 457

<210> 5377  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-B2  
 <400> 5377

ggtccagaaa tcccgggtcg acggggactt gaagctggcc cagatatgcg gcaccatcgc 60  
 ggctgacgaa aggcgccatg agcttgcccta taccaagata gtggagaagc tcttcgtggt 120

cgatccccgac tacacgggtcc tggccttcgc cagcattatg aagaacaaga tcacgatgcc 180  
 tgcccacctg atgtatgatg ggcaggagga caacctcttt gagcacttca gcgcggtggc 240  
 acagaggctg ggcgtttaca ccgccatgga ctacgccgac atcctcgagt tcctgggtcaa 300  
 gaggtggaac gtgcgccggc tcaactgggtt gtccggtgaa ggcgcgcgcg ctcaggatta 360  
 cctatgctcc ctaggaccaa ggtttangaa gctgggtggag cgagctcagg ggagcgggaa 420  
 gcagttgcct gttgttcctt tcagctgga 449

<210> 5378  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-B6  
 <400> 5378

ggtaccggac cagaattcgc ggtcgcacgg ggacttgaag ctggcccaga tatgcggcac 60  
 catcgcggct gacgaaaggc gccatgagct tgcctatacc aagatagtgg agaagctctt 120  
 cgcggtcgat cccgactaca cggtcctggc cttcgccagc attatgaaga ggaagatcac 180  
 gatgcctgcc cacctgatgt atgatgggca ggaggacaac ctctttgagc acttcagcgc 240  
 ggtggcacag aggctgggcg ttacaccgc catggactac gccgacatcc tcgagttcct 300  
 ggtcaagagg tggaacgtcg ccggcctcac tgggttgtcc ggtgaagggc ggcgcgctca 360  
 ggattaccta tgctccctaa ggacaagggt tangaagctg gtggagcgag ctcaaggag 420  
 cgggaagcag ttgccctgtg t 441

<210> 5379  
 <211> 203  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-B8  
 <400> 5379

taccggacca gaattcgcgg gtcgacgggt ggtaagaaga gtttttgcag taactggggg 60  
 tgaaaggaga aaaccaaaga agaatgtgta catataccta cggcttggat gattgggttg 120

tgaaatggag atattgttgg ttaattgatt tagtgctgaa aaaaaaaaag aattttaaaa 180  
 aaaaaaaagc gggcgctcca aaa 203

<210> 5380  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-C1  
 <400> 5380

cggtcctaga atccccgggtc gacggggctg gtgatcaccg ggtggggcgcc gcagctggag 60  
 atcctagcgc acagcgccac ggcggcgcttc atgagccact gtggctggaa ctcgaccatg 120  
 gagagcatga gccacggcaa gccgattctg gcatggccca tgcactgcga ccagccgtgg 180  
 gacgcggagc ttgtctgcaa ctacctcaag gccggcgctcc tcgtagcgcc atgggagaag 240  
 cacggcgagg tggtcacggc gaaggccata caggaagtca tgcaggaggc catgctctcc 300  
 gacaaaggaa tggccatgcg gcaacgggca agtgcgctcg gggaggccgt ccgcgctcc 360  
 gtggttgacg gcggttcgct gcgcaaggac ctagatgatt tcaactgctta catcacaagg 420  
 tgatcgacan aatgccatcc tggacgat 448

<210> 5381  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-C3  
 <400> 5381

cggtcagaa atccccgggtc gacggggttc agtctcttat gatactccca catattctga 60  
 tatgaagaag acattttgcg ttaatatgtg agcagttagt ggactttttc aatgccagga 120  
 agttcaggat acgaatggct taagggctgg ttaaaatgat gagttcactc aggacgctac 180  
 tgaagattac tatgaaggag gaacatatgc ttgtaagaat tgcactaatg tcaagtttcc 240  
 gctctatgtg cttaacgttt tgacgttatg catgtgttcc ctccctatgc tacttgattt 300  
 ttgttcccct aagttgtttg ctcaaaaat cactattcat atgaagtggg ttaggcttaa 360  
 atgtgctact aatatgcttc atgatgctct cattctgtct caattcgtat cgtttatgcg 420

agcatcattg aaatcatcat gccttagc

448

<210> 5382

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-C4

<400> 5382

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ggtgtatgga atcacgcgaa gagtgatggc catgaatact aaggctctcca tgtagcgag 120  
ccagccagga aatatgccat aatcaaggaa cttgactatc cagttactat gaaggatgag 180  
acagttgtcc tgcagtttga attgaggctt cacaatggcc ttgagtgtcg acgtgcttat 240  
atcaagtata tccgtcctca cgcgaccgga tggaacacca aggactttga cagtgatact 300  
ccatacacia ttatgttttg tcccgacaag tgtgggttcaa cgaacaaggc tcacttcac 360  
ctgaagcaca cgaaccctaa gactggcata tacgttgaac atcatctcaa gtccacact 420  
ctg 423

<210> 5383

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-C5

<400> 5383

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acggagctta cgagttttgt ttgagttttg tgtgggtgaa gttttgaagt tttgggtaga 120  
gattcgatgg actatggagt aaggagtggg aagagcctaa gcttgggaat gcccaaggca 180  
ccccaaggta atattaaagg acagccaaga gcctaagctt ggggatgccc cggaaggcat 240  
cccctctttc gtcttcgttc atcggttaact tgactttgag ctatatTTTT attcaccaca 300  
tgatatgtgt tatgcttgga gagtcatttt cttttgtag cttttgcttg ctgttagttg 360  
taataatgtg tttcatcggt actttcagta tacatgacaa cgataccctt tgccatgctt 420  
actttg 426

<210> 5384  
 <211> 251  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-C7

<400> 5384

tacaactcac tataatgagt cgtattaagt cgacgggggtt gaattcagtt aattgtaatc 60  
 aatacaagtg tgatgatcat catatatata gcattgccca cattaaaaaa aaggaaaaat 120  
 gccaaattca atgaaggccc aaataaaaaa ttacaataaa gaaagaataa gcggccgctc 180  
 taaaggatcc aaacttacgt acacgtccat gcgacctcat agctcttcta taatgtcacc 240  
 taaattcaac t 251

<210> 5385  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-C8

<400> 5385

gtaccggacc agaattcccg ggtcgacggg ttgatcctgc tgaaaatcag aaacttttgc 60  
 acccaataaa ttagtttttg taatccaaag aaacgtgatt ttgatatgat gctttttgat 120  
 atgtactggt acacaagtgg tttagggttt cgcaatttat caggatttgt ggagttacag 180  
 aagtattcta gagttacagt ttactacaga cagttatggt tctgacatat tctgcattct 240  
 atgtgttggt tgcttatatt gatgaatcca tgagtaatat gggagggtat gaaccataga 300  
 gaagttggaa tacagtaa atttcacaaa tatgaattta gaatgagttc ataacagtac 360  
 ctaagtgggtg atttattttc ttatactaac ggagcttacg agttttctgt taagttttgt 420  
 gttgtgacgt tttcaagttt tgggtaaa 448

<210> 5386  
 <211> 460  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-C9



<400> 5386

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ccatcgctgt caacatcggc gaccagctgg aggtgatcac caacgggcgg tacaagagcg 120  
tgatgcaccg cgtgctcacc cgccacgacg gcaaccgcat gtccatcgcc tccttctaca 180  
accccggggc cgacgccgtc atattcccgg ccccgggcgt cgtgggcgt gccgacgctg 240  
ctgagaggaa cgagggcgag gagggcaccg ccgtataccc aaggttcgtg ttcgaggact 300  
acatgaacct gtacgtgccc cacaagtctg aggccaagga gccacggttc acggccatga 360  
aggcagacgc cgcacccatc gccaccgcat gataactgat acgcgcccgg acccgacga 420  
gagtattgtg agacgtgttt tattttcttt tgggcgtgcc 460

<210> 5387

<211> 446

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-019-Q1-E1-D10

<400> 5387

gtaccgatcc taaattcccg ggtcgacggg gtcgattgct gacctgacaa ttaaactgtg 60  
aaagaagggt gtagcttcaa gtaatggtac atcagttcaa gaagctgaac agcgtacaat 120  
tgaaagcata tgtaatcagg acaagacagc agcctcgctt atatgccagc tcaagaaacg 180  
tcattccaca caaatatcaa caatgccaat gatgaaagat gtccttggtg ttgtggctac 240  
cttaggaaaa acaaatgatg ataactaag cagcctactc tcagagtact tgggaataga 300  
caatatgctt ggtctcgttt gcaagactta tgatggcata aagagtcttg aaacatatgg 360  
cacagaaggc aacattgata agaaaagtgg tattcatgga ctgggtggct caattggnaa 420  
gattctgcat gggaggttta cgtgtt 446

<210> 5388

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-D11

<400> 5388

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cactcacagg cgtcacctgc ttgatggtcg aagacgaggg aagggcgaca acatctaaaa 120

ctccgcgttc cacgacgccg agaggtaggc tctctgacgc atgacaaggc tccacggggg 180

cttggtgatg ccagggtccac ctccgaatcc tgaagagacc ccaacttgag ctgctccatc 240

gatagagggtg aaacagatac cacaatacat gcacacaccc aaggcagaat acatgagctg 300

aagattagca acaacgcccc atacaagtcc aagcaaagca cctcgctcgt caccttctat 360

atacataaat attatagagg ttgtaataca gagaatctga aatagctctt cacaccaaaa 420

ccttttaaaa tagttttgtt accttttttt gc 452

<210> 5389

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-D12

<400> 5389

attccccgggt cgactgtacg gacaccgaag ccttagaagc tttcaagcat agcgttcgag 60

acgaatgggt tgccatacac ctcggtcaag aaaagccgag aacaatggta gcattaacaa 120

gcctcatgac ccgtttttgc gcgggagagg acagctgggt agcccgatgc ggcaccagcg 180

actcaagtac atccgaagtc agggatggaa acgggaaatc atgacgcagc aagaataagc 240

gctagaataa agaagacagc ccgaagagca ggacggtaaa cgccggattt agaagctctc 300

ggctaggcca gcagaagccg cctccaaag gcaacagaga tgaactgtcc agcctaaaca 360

aaattctgga ccaaatatgt tagatccata gcatecctga taaacctgca tatcataccc 420

acagagaatg ttgggt 436

<210> 5390

<211> 440

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-019-Q1-E1-D2

<400> 5390

ggtccagaat tccccgggtcg acggggccta gctaggggcg ttaaagcata gcgcttggtg 60  
 ggaggcaacc caattttatt ttgtgttttt tgtttttgct tatgtttagt aataaataat 120  
 ccatctacct tctgtttgga tgtgggtttta tgttttaatt agtgtttgtg ccaagtagga 180  
 cctatangat aacctacgat gatagttgat ttgattctgc tgaaaaacag aaactttgcg 240  
 tgcacgaata taattatgat aaattacagg aacgtgattt tgcgttgatt attttttctg 300  
 ctgatcaata aacaaattgt acagaacttc ctatttttgt agaattttta gagttccaga 360  
 agtttgcggt agttacagat tgctacagac tgttctgttt ttgacagatt ctgtttttcg 420  
 tgtgttggtt gcttattttg 440

<210> 5391  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-D4  
  
 <400> 5391

accggtccag aaatccccggg tcgacgggga aggagaagaa gctcaagtca aaaaagcaca 60  
 ggaggcgaag ctattcttcc tcagaatctg acagtgaatc cgagagcgac agcgatcgga 120  
 aacacaggaa gaggaatgac cgcagaatgc acangaaaca tggccactct gactctgatg 180  
 gtgccaggag gcgcaagcac aggtcaaaga ggaggagctc agactctagc gatgagagcg 240  
 acagtgatga atatgatagc gaatctgaag aagagcgccg aaggaagaag cactcgcaca 300  
 ggaggaagca tcgccgtcac tcttcaaggt cagagtctga tgcttcagat tacagcagcg 360  
 atgatgatga gcgaaggatc accaggaagg aacacactan gagccggatg caccgccacc 420  
 gatcatcaga cgatgaatcc gangacaa 448

<210> 5392  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-D7  
  
 <400> 5392

aattcgcggg tcgacggggg tatgagatag tccttggttg atttatataa tgctctttgc 60  
 acttcacttt atcttgtgag tatggcttta tagaatgctt catgtacttc acttatatca 120  
 tttgaagttt ggaattgcct gtttctcttc acttacacaa ccgccatttg tagaatgctc 180  
 tttttattcg cttatatattg ttacagcatg gacatatctt ttgtagagag aattatactc 240  
 tcttgcttca cttatatcta tttagagaga cgacaggaac tagccattca tatggttagt 300  
 catataatcc tacatacaac ttgtagatca ttgaatatga tatgtctgat tccttgcaat 360  
 agttttgcga tataaagatg gtgctactag agtcatgcta ctcggt 406

<210> 5393  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-D9  
 <400> 5393

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 tgtgtggagg tcgggatcac gcgatggta actcctacca acccttcccc taggagcatg 120  
 tgtgtagtac tttgttttga tgactttagt atttttgcaa taagtatgtg agttctttat 180  
 gaataatgtt gagtccatgg attatacgca ctctcaccct tccaccattg ccagcctctc 240  
 tagtaccgcg caactttcgc tgggtgcatta caccacccat ataccttccct caaaatagcc 300  
 accataccta cctattatgg catttccata gccattccga gatatattgc catgcaactt 360  
 tccaccgctt catttatgac acgctccatc attgtcatat tgctttgcat gatcatgtag 420  
 ttgacatcgt atttgtggca aagccaac 448

<210> 5394  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-E1  
 <400> 5394

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 cgcgtcctgt atctgccagc ccttcgtagg tcctggggcg tataagtaca tttatatagc 120

acctaggttag taaaacagat ggtctagccg atgtctactt ctagtcctat ctcaaattatt 180  
 ttctttttctc tctcttccat ctgtttctct tttctgagat gagaaaataa aaaccttcag 240  
 cagtgtctagg cgggcccaac tctccttgtc tctctctctc tctccctagt ttttcctcca 300  
 gccagctgg gctaccagc gcctgccggc ccatccccta accaaggccc gcctaaaccc 360  
 ttctaaacct agctgcacag gagccatcgc tccatcncct cacagccact cgatcccaac 420  
 tctttgccgc 430

<210> 5395  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E10  
 <400> 5395

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 acccaataaa ttagtttttg taatccaaag aaacgtgatt ttgatatgat gctttttgat 120  
 atgtactgtt acacaagtgg tttaggtttt cgcaatttat caggatttgt ggagttacag 180  
 aagtattcta gagttacagt ttactacaga cagttatgtt tctgacatat tctgcattct 240  
 atgtgttggt tgcttatttt gatgaatcca tgagtaatat gggaggggtat gaaccataga 300  
 gaagttggaa tacagtaaatt atttcacaaa tatgaattta gaatgagttc ataacagtac 360  
 ctaagtgggtg atttattttc ttatactaac ggagcttacg agttttctgt taagttttgt 420  
 gttgtgacgt tttcaagttt t 441

<210> 5396  
 <211> 324  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E11  
 <400> 5396

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 ggcgccggtg cgccggcgga aactttgggc cggtcctttt taaaccatta gattaatgcg 120  
 ctgatgagcg ttagataacc acgcccaggt catcgtctcc acgcacaaat tctccctacg 180

cggaaaaaagt ggatcgtgaa cgaagtgcgg cccacacgca ccagctgttg tgccaccggg 240  
 cgtgcgtcgc cagctccaac accatcagcc cccatcgtcg ccgtcacaga cctccggcat 300  
 cacgggttcg catcacctca tcgc 324

<210> 5397  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-E12  
 <400> 5397

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 gtccgtcagc cattggtgaa taagcaaact gctaccgatc ccagggtgcc caatcttgac 120  
 taccgtccaa tcaggaacga tgcattggagc caaagaatga gagacaagta tggggtggat 180  
 tcctttgatc caaacagggt tcaacaggcg acgatatctc ccgcagaaca tagaaacaga 240  
 tgcacaatcc tctgatgctt ggtcgatgca gttcagtacc ggtctccgaa ttacagcca 300  
 gctgtgcaat aacatcgact cgcattgtagc atgtggctgg gtgatctgat gtttccaagt 360  
 tgtgttggat gtggcgagcc cttgcaatcg cccgtcgtag ttctttcagt tacatactca 420  
 gaaatctctg catctttcag tctttgcaat aattgaaact aa 462

<210> 5398  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-E2  
 <400> 5398

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 tggttgatcg atatcattca ttacatgttg ggctgccgtt ttccgccctt ctccggaata 120  
 aacgtgtact ttatcagaga taaaaaaaaat aagagtacag acgctccacc atgcggttct 180  
 agtagtagta ctactcgtac taccgcgctt ggctctttgc ctcttcgtga agtcgaacaa 240  
 tgatggtact ccgatgttg ggtactacag tgtatgcctc tgacaatctg acaccgaatg 300

gactgatgca tgtccaccga gggtaggttg cattagtcaa aaggcgtaag cgagcttcac 360  
 cttgtcctgc aagcttctcc tcgttctgcg agttgacggg acacaccana aagtagtgct 420  
 agtccatact ccttccttt 439

<210> 5399  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E6  
 <400> 5399

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 ggtcttcctt ggcagtagca ctttgcaaaa aggatcctta gtcagttgca acccttaatt 120  
 aagtactcca acttagcata agctctgttc ccagtcctta ggtagaatac atcaccgagt 180  
 gttggccaag gacatgtttc tttgcttttc tttctcttta caagtcattg tcctctgatt 240  
 tactccaact attttcacca acgcctgctg gagatgttgg atgatgtagc tgacactgct 300  
 gtgtgttggg gctctattct ttgggtagag atgtgttgcc tgcttgaggg atgcttgaag 360  
 cagagtatcc cggagactag cagatatgat gatcgaaact tttatcttag ctttctgtct 420  
 ctactacttc ctgatg 436

<210> 5400  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E8  
 <400> 5400

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 tacgtcagta ggtgaaacaa tatctagcca atattttgat gacttgtact ggccattctc 120  
 catcccaact ccttcaccta cattatcaaa ttcacattg tcgtccctct tattggggtt 180  
 gtacagcaca ccttccatgt tcaacctttc cattaccatc taaaaacaca aatgaaacac 240  
 gataagtagt tgaacaatta aaccatgttc aatacaactt ctaaattacc tgtgcacatc 300  
 tttgggggtat attgagaacc tctttgtgaa gcagctttat gtatgtcatc acacgggtcca 360

tactacaagt catgttcgat gaaaccgtgg acgtgcttgg ctttctactc ctgacaccac 420  
ctttc 425

<210> 5401  
<211> 449  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-019-Q1-E1-F10  
  
<400> 5401

gtaccggtcc agaattcccg ggtcgacggg atgttggaaac gttaaatttg gagggtttaa 60  
ttgccaatga tgtggtgtct cccaaccat ggttgaattg gccggttccc atatggatca 120  
ctccaagttt taataagatc cacaataaac taggtttcca gtataaggac gttactggga 180  
agggaatgct cttgcttctc atcaataatt tactacagaa ctattctgac tggacatata 240  
cgttgagctg ttgtttttgt tagggcaagc aagcagaaag aattaattta tctggtggtc 300  
agcctggcga aggatttggg aaaatgttcc ctaggggaag gagaaaataa tgtttatggt 360  
ggctgaaatc gaagttgctc tgcgaagaag accagatatc agtggaataa gaatgctctt 420  
gcttctcatc aataatttac tccagaact 449

<210> 5402  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-019-Q1-E1-F11  
  
<400> 5402

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accaggggag acgtaggatg ggagttcgac caaggcgaac tgatatggag gatagtgtac 120  
ggcgaactgt ctatgtctca gacattgatc aacatgtcac tgaacagaag cttgctgagg 180  
ttttctcaaa ctgtggtcaa gtggtagatt gccgtatctg tggatgatcca aactcagtga 240  
tgcgttttgc ttttatcgag ttcgccgatg atgtcgggtgc aagagcagct ctaacgcttg 300  
gtggaaccat tcttggtttt tatcctgtca gagtctgcc atctaagact gcaattttgc 360  
ctgtgaaccc caaatttctt cctcgaacat aggacgagaa ag 402



<210> 5403  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-F4

<400> 5403

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gggtcgacgg gccagcagag tgggtgctgca atcatcaaag cgaggaagct ctccagtgct 60
ctctctgctg ctagctcagc ttgtgatcac atccgtgact gggttctggg aacccttgag 120
ggaacatttg tttccatggg tgtgtactct gatggttcat acggtgtgcc tgetggtctt 180
atctactcct tcccagtaac gtgcagtggg ggtgaatgga caattgttca aggtctcccg 240
atcgatgagt tctcgaggaa gaagatggat gcgaccgcc aggagctgtc ggaggagaag 300
gcgctggcct actcatgcct cgcgtaaatc cacattggaa gggcagctgc tcctctggat 360
gttttgaata aatgaaacct tccgctcctt agaaactctc gtctcccacc agaacagccg 420
cacatcgcca tgcatt                                     435
  
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<210> 5404  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-F5

<400> 5404

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ttcgagcatg togtcaatca ccgagtagcc atttgatagg tgcttctccc tgcggggcca 120
gctcgagtgc tgggactcga acttggcctt gagctgctcc tcctcggcct tcagaagcca 180
gacctgctcc atgtgccggg ttgcttggtc cgccagctcc gtctcgagcc ggtcgcgcgc 240
catggctgcc tggtgcatt ccagctcctt agcctggagt tggctctcga gctcatgcac 300
gcgggtcctc agccggggcg cgacctctgc aaaagcaagc aagaatcatc aacatctaca 360
tcagcgaaaa caagaagctt tcagagaaga ttctgcctga ctactcaaca gtcggcccga 420
atctcggngg gctacaccag ttggtgcgct                                     450
  
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<210> 5405  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-F7  
  
 <400> 5405

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 aaactcagtgt gtgaaacaac tgttcaaaat gctgttacag aagtcgctgc catgggttggg 120  
 gagaatgtaa aactcagacg aggtttcatg ttgtccacga ctggacatgg tgtcgtttca 180  
 tcttatctgc atacctgtcc tcagccaggt ttgggcccga ttgctggatt gattacatta 240  
 gaagcagaag atagcagtgc ttcccttgat gctctcaaga gagttgggtc gtctatcgca 300  
 atgcatattg ttgcagcaaa accattattc ttatcaaaag aattggtttc tgctgcagct 360  
 ttagaaaatg aacgtgacgt gtcccgaact caggctgaaa gttcaggtaa accccaaatg 420  
 gccatagaga anatggtgga aggccgat 448

<210> 5406  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-F9  
  
 <400> 5406

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 atttgcgtgc caaaaagttc tctcacgtca cttttggccc aagagaagat agagtccaag 180  
 tctctcacgt tctggattca gattcggact gcacagacac acctgactca aaacgcacac 240  
 aagtgtttca tacggactcc gaattgggtg attctatattt tgttggaac tagatttcgt 300  
 gaactttcca acccaattgg aatcaccttc aaattcgtcc ggagcgttga gttgtggacg 360  
 aaacaatgtg atgctgcagc agaatccgag tcaaactaca agtccaaagg tgtaacatca 420  
 cct 423

<210> 5407  
 <211> 279  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-G1  
  
 <400> 5407  
  
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 gcgcctcttt cgatctgtat ccagtttgt gctagccatc ttatggcaac ttgtttaact 180  
 tatgtctgta ctcagatatt gttgcttccg ctgactcgtc tatgatcgag cacttgtatt 240  
 cgagccctcg aggcccctgg cttgtattat gatgcttgt 279

<210> 5408  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-G10  
  
 <400> 5408  
  
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 atgaaggacg tcgccaaggt cttctgaatc agttcatttc acctcagccg tccgatccag 180  
 gagccgatcc atctacgtac ggcttcgtat atcaatttca tgcaactacc tactccggtc 240  
 ccgatccagc ctcagcttca cctgaggccg gccctaattt tgtttgatca attttttgct 300  
 actagtagta actagtgatg atcactgttg caccatttat ttattttata tcgtcacaac 360  
 tttccagtgt ttcttttctt tctctacctt tttgtcgatc gtcggctcca gtcgatcga 420  
 acgatccatg ctgctaattg tttgtgta 448

<210> 5409  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-G12  
  
 <400> 5409

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 ctgagaatct tgctcaattc tattaggggtg gccttcagga tacaaatgtt cctgagtcac 180  
 tctaccagtt ctagtagcca ctctaacagc ataatcatta ttcttactat tcaattcatt 240  
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 tttagtaatg agtttaagtt cacctttaac tctagacata taatcaccca agtggttcaat 360  
 catataagca ttttgtttta attgtctacc aatataagca ttgaaatctt cttgcctaac 420  
 cataaagtta tcaaactcat ccaaacat 448

<210> 5410  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-G5  
  
 <400> 5410

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 gggatggtag tggggaacca tggcttagag acgcgcttgt ctgaaatgtg gggtaagtta 180  
 cgaaagtacc cccaccgatt tgaggaggtt ctttcggttc aggggtacca cgggcatttc 240  
 gcgtgtcggg atttcacagg aggtgggagt tttcgcgcgc gttgtaattt cggaatagca 300  
 aggcacgggt tgagatggag ggagttgtcg gagcacaaca agacaaagat atatcttaaa 360  
 tatttcgggc taacaaggcg cgggttgaaa tttccggaca agcctaacat gtacntgtac 420  
 anatcaatgc gccctacana tgtc 444

<210> 5411  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-019-Q1-E1-G7  
  
 <400> 5411

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gctcagtctc tcgaaagtgc ttataaaaat aggggtgtgtg tgcattcata ggggtgaatg 120  
tatgtgcgta tgtatgagcg cttgcatctg ataaaaacaa ctactctcac gacaactcat 180  
cataatggtc aagggcgaga cggtacacgc tccgcactaa gaaaatcctg cgcggatcgg 240  
tacgacgtga tgtattacac cactcaccgg ctaacccggg cagtgataac tatcaacatg 300  
gaataacaat tgaagttatc actgaccgtc cgctagctga aggcattgtgc aacaaagaat 360  
aaacaacaac acacaattac agaggcaaca cagaagacat gaagacatgc acatataaac 420  
attggtgaac attcgattat c 441

<210> 5412  
<211> 449  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-H5

<400> 5412

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gagaacaacc gaccgggtgca gtcccctgaa gaggttggcc ggctggattg cgtgccagcc 120  
atcttcgatg agtcccagtc ccgggacaag atgtgtgttt tctccgtatc agcagcaaga 180  
gtttctctag atgaactgaa tgaatcagca gtgcttttgt gcctcgaatg gtctccgtgt 240  
ccgtggcgac cggagctcga gtttcttctg gcaaatacct ccacggcacc ggtgaatcta 300  
tcccggatct cttgtcctac tgaaagtctt tctgttctct caacagatgg cccaactcca 360  
gccaatcttc cactcggttg tcgaacaagc ttgttactgg aactcatatg aggatacttg 420  
agtgcggtcc agtcaaatac ataatcaaa 449

<210> 5413  
<211> 427  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-H7

<400> 5413

gtaccggaca agaattcgcg ggtcgacggg agacttaggg ccaggcagat gatgtctggt 60

gatgaactta tgatgtctac agaaggtcgg agctttgtgg atggtggcat gaaggagata 120  
 gaagctggag gtagaggata cagaagaggg gcaaatgatg atttcatggt ttatggacag 180  
 gacaactcaa tggacaggag gagctccttg gaccccttg ccgaggcgca ttacaagaga 240  
 cccactcctc tagaggaaaa gaagaatgtg cacagtatgg gcgatgagtc cttcatgata 300  
 cctgttacct ccaactcaca tgataacctt ggagcagccg gccgtactgc cattgacatt 360  
 gatgccgagc ttggctcaag tgttcagaaa acatcagatg ctaaggctgg cgctgaactt 420  
 ttctatg 427

<210> 5414  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-A1  
 <400> 5414

ttcccggtc cacggggagt gcgacaaagg tgccatggcc gccatagccc agtctgogcc 60  
 ggattctgtg ctgatgacat tggcggagtt tgagacgaca agagaggcgt ggaatgcact 120  
 caaagagatg aggattgaat aaaatcgtgt cacgaaggct cgggcacaag tgctgaagcg 180  
 ccaagttcac aagttgcaga tggagaaaag tgaatcgggtg aacgactatg ccatgcagat 240  
 ggagaaagct cgacgagacc gagattgtgg agaagttttt cagttcggtc actgataaat 300  
 tcacgtacat catcgggacg ctcgagcagc tttacgatat cgacgacatg accataacgg 360  
 aagcgatcgg atgcttgagg acgtgggaag agaatgctcg tggatgtcgg aaacgcaaag 420  
 gaggaggtga tgaccaactc atgtactcac gcgc 454

<210> 5415  
 <211> 463  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-A10  
 <400> 5415

ggtcctaaat tcccggtcc acggggagta gtttaacaca gaccttcggg tgcctagtta 60  
 ttagctagat ggcttcttct ctctcttttg atctcaatac aaagttctcc tcaatcttct 120

tggagatcta tttgatgtaa ctcttttagc ggtgtgtttg tcgagatccg atgaattggg 180  
 ggtttatgat caagattatc tatgaacaat atttgaatct tctctgaatt cttttatgta 240  
 tgattggtta tctttgcaag tctcttcaaa ttatcagttt ggttttgcct actagattga 300  
 tctttcttgc aatgggagaa gtgggttagct ttgggttcaa tcatgcagtg ctcgattcca 360  
 gtgatagtag gggaaatgac acgtattgta ttattgccat cgaggataaa aatatggggg 420  
 ttatatcata ttgcttgagt ttatccctct acatcatgtc atc 463

<210> 5416  
 <211> 467  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-A11  
 <400> 5416

ggtccaggat tcccgggtcc acggatcacc ggaaaacgac atcctccagc tcctttcttca 60  
 attcctcaca acttttcttg aaagcagcca tggattcctc cacctcctgc tcgcactcga 120  
 tccggagctt cctcaagtca cccatcagtt cctcgacgac cgctgtcagc gtcatcccca 180  
 aggcactact ctgctcatgc agcatcttcc tgccaacggc ctctctcttc tcgccgaacg 240  
 ccttgaggat cttcgcattg tcatgatga gttgctcaat gaggcgggtc tccttgtaa 300  
 ccgaggcacc tctgatcttg agcagcttca tcaagccgtt gaccagctcc tgctgcttag 360  
 tgacgccagt gagaatgtca tcgtccccgg ccaaagactt ccggaatgcc agctcatcgc 420  
 gatggccgac gtcgcgagtg cgcttgtag agccctcgcg tgcccg 467

<210> 5417  
 <211> 470  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-A2  
 <400> 5417

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 atgctcatag ggatagggta tgcgttcata ggggtgagtg tatgcgtgtg tatatgagca 120  
 ctctatttg taccgtgtta aaaaaagatt ccaagggtccc aaagataatg aacttgatta 180

aaaatttgtg tatataaatt cattcttttt agataaaagt ttgaatttaa tttggttggt 240  
 gtgcgcaaaa cctaggctat agtgcaacgc ctagacgaca catgggagcc tcagcagcaa 300  
 gccactgtga tggactcttt ccaacaaaaa ataaatctaa aatctttgtg aacatataat 360  
 ccaaataatca gataataaac ttgatataac agattaaagg taattacaca ctggtgctag 420  
 aacttgccat gaatgtgcac tttagtgcct gaacttgcaa aatacattta 470

<210> 5418  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-B10  
 <400> 5418

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 gagggggata cgtccggatc tgtaaccagc ggtgaggata gaaagccagt gttttttgaa 120  
 gggagaaaga cagtgttact acccttatct tgttttagatc tggagaggat gagagtgtgt 180  
 gaatagagca atcctagcaa gcaagcgoga aggctccggc ctatatatac gtagtgggggt 240  
 agttttcctt tttcactcca tcaaaacaat cgttttaaata tgtgtactac tacatgccag 300  
 gtcgcatttt tttagtgtgt gattgttttt tgagatagct acccgcttgt tccaagtgggt 360  
 gttacggtgt gccaaagtcgc actttgtatc gttcaagtct ggtactacaa gtccctccat 420  
 taaatgaaca acaaccctc gtaaaattgt gagcaagcca c 461

<210> 5419  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-B11  
 <400> 5419

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 gtcgtctgga gcggtagagg gcgttcgagg tgagcatcgc tgaaggtgca gcagcggcag 120  
 gcaccgtatt gcagtagtct agttcgtcag tagcctcctc ctcctcttcc tcttattgag 180  
 cgcgcttggc agaggagagg ctaccggaaa tagtaciaag cccctccgta gtagtattta 240



ggggctatatt tgttcagttc atctgactat agatgtggtg gaactgtaca acatacttaa 300  
aagtagctag tatatatagt tgaactagct atttcagtac gtggttggca acaattgggg 360  
aaaaattcgg tcgattcagc tataaagttg aacggttttt aaaaattaag cagcactact 420  
taatctatga atggaatcta tgcttaatta ctgaatttta gttgcaaa 468

<210> 5420  
<211> 491  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-B4  
<400> 5420

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tcttgaagac attttctctt ggtctggatt tgggcatttt tatatcgtgc agtccgcagt 120  
ttacctgcat ctttcgcttt gaagagtgtc catttgctat gtcacccacg agatttgttc 180  
ttgtaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aaaaaaaaga aaaaaaaaaa 240  
aaaaaaaaaa aatgaaaaaa aaacaacttg gaaaaaaaag aaataaaaaa aaaaaaaaaa 300  
gggccgccca aaagggttcca accttagtta cccttgaatg gaaattcaaa acccttcaaa 360  
agggtcccca aaattcaatt cacggggcgt cgtttaaaaa catcgtgacg ggaaaaaccc 420  
gggggttacc aaatttaacc cccttggaag aaatccccct tttccaagcg ggggttaaaag 480  
cgaaaaggcc c 491

<210> 5421  
<211> 467  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-020-Q1-E1-C11  
<400> 5421

ggtccagaat tcccgggtcg acgggatcca tctcatcttg gaaaagatct cttgattcag 60  
tgaagcaatg aaactgacac cataatattt tgaattaaaa tcagaaatca ttttcctctc 120  
ttggctaagt aaaaggaagc ttgtatgtaa aacaattatt tggttaactga tatcatcaag 180

aaagctgtgt ttctatcatg ttttcacctg catacgtgat gcatagcagt acaccattat 240  
gtaagaacta gagctcgaat ttacatgagt ccattagtct ccagatctag caatggctcc 300  
tataagtatg caattcctat aatgcagtta tattctagac aaggctcctga taaagaactt 360  
gattactacc aggataacaa ggtgctaata aataaaaaata gaaggtgcca atgaactaaa 420  
ataatagaag gtgctaata tttatgtttc ttaactaaaa tgcaaaa 467

<210> 5422  
<211> 474  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-C6

<400> 5422

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tgatttcatt tcctttcttc tttgagggca ccaatgctgc taatacattc cttcatcgaa 120  
aacttccttt ttgtgaaact tgtactatta tgtgcttatt attgtatatt ataataagct 180  
tattgtatat tataataagc acaatttccg tcttaattga gtgcaaactg tgccttctgt 240  
tttttttcat gttctttctt cttaaagggt aataccaatg ccattaattc attccttctt 300  
agaaaaacttt gttattttta tttgtttcag catttgtttt attttctttc tatgagggta 360  
ataacactcc cactacttca ttcccttctg agaaactttc tttgcgaaaa tttcattatt 420  
atatgcttat acttgcata tatanaggct acattttttg tgtaaactgt gtgc 474

<210> 5423  
<211> 479  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-D11

<400> 5423

cgcttgccgg taccgggtcc aggattcccg ggtcgaccga ttttgacatg ggaggagtcc 60  
gttaagagag acctgaagga ttggagtatc gacaaagagc tagctatgga caggggtgcg 120  
tggaagcttg ctatccatgt gccatagcca tgagttggtt gcgagatctt atgggtttca 180  
cctctagcct accccaactt gtttgggact aaaggctttg ttgttgttgt tgtttcattt 240

ttttatgaat gtactgttca tgagggtgta ggggcacccg ggagctgtta gacattttctc 300  
gaaactgtat tgattttttt attttaagat ttggcttaat ctgaccaatt agattaacac 360  
attctttttt aattgctatc agaattgaga gatccagcaa agatatatgt caaattgttt 420  
attgtctagc tattgggttc tattgatatt catgtcaaat ctctattgat gatcatttt 479

<210> 5424  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-D12  
<400> 5424

ggtccagaat tcccgggtcg acgggtaata tgctaggtat tcaagactag taaaaacttt 60  
cttatgagtg tgttgaatac taagagaagt ttgatgcttg atgattgttt tgagacatgg 120  
aggtagtgat atcaaagttg tgctagttga gtagttgtga atttgagaaa tacttgtgtc 180  
gaagtttgca agtcccgtag catgcacgta tggtaaactg tatgtaacaa atttgaaaca 240  
tgagggtgttc tttgattgtc ctcttatga gtgacgggtcg gngacgagcg atggctcttt 300  
cctaccaatc tatccccag gagcatgcgc gtagtgcttg gtttttgatg actttagat 360  
ttttgcaata agtatgtgag ttctttatga ctaatgttga gtccatggat tatacgcact 420  
ctcacctttc catcattgct agcctct 447

<210> 5425  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-D2  
<400> 5425

attcccagat cgacgggacc tgggaggtgt cgctgccggc ggaggaggtg ccgcccagac 60  
tgcccagacc ggccctcggc atcaatttcg cccgcaacgg catgaaccgc cgcgactggc 120  
tctccctcgt cgccgtccac tccgactcgt ggctcctctc cgtcgccttc ttcttcgggg 180  
cgccgctcac cgccaacgaa cggaagcgct tgttcagcat gatcaacgat cttccaaatg 240

tgtatgaaag tatggttgac aggaagcaca gggacaggtc tggtgttgat agcagtggca 300  
aatccaggca ctcacatcanag ccaaagcagc gaactgatga tgtccgcaa agaactccag 360  
ggcagttgcc cgagaagaag acgaggacga nggacaagaa gaacacagcg aaa 413

<210> 5426  
<211> 482  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-D9  
<400> 5426

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aggagggcga cggcaagaag gacggcgacg ggaagaaggg ttgggcgggc tacatcgagt 120  
ccgtcggccc ggccaaggag cccgagaaga aggaggagaa gaaggaggag gccaagaagg 180  
agggcggcga cgccaagaag gaaggcggcg acggcgggcga cggcaagaag gacggcgatg 240  
ggaagaagga cggcgacggg aagaaggacg gcgagaagaa ggaggagggc gacggcaaga 300  
aggacggcga cgggaagaag gacggcgggc tacatcgagt ccgtcggccc ggccaaggag 360  
cccgagaaga aggaggagaa gaaggaggag gccaagaagg agggcgggcga cgccaagaag 420  
gaaggtggcc ccgtgtcgt tncgcacca catgccgctg ccgcaccaca tgccgccgcc 480  
ct 482

<210> 5427  
<211> 474  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-020-Q1-E1-E11  
<400> 5427

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gccgggcaac ttctggtgg gcgcgctgga gctgtcgggc cctgcacct cctccatcat 120  
catccggctg gacggcaacc tctcggcac cggcgacctc accgcctaca agaagaactg 180  
gatcgaggtg atgcgcgtgg acaacttcgc catcaacggc cacggcggtca tcgacggcca 240

gggccccctc gtgtgggaga agaacatgtg cagcaagcac tacgactgca agatcctccc 300  
 caacagcctg gtgctggact acgtgaacaa cgcgacgac cgcgggcatca cgctcaagaa 360  
 cgcaaagtgc ttccacctca acctcttcaa ctgcaagaac gtgctgggtgg agaacgtgga 420  
 gatcacggcg cccgggaaca gcccacacac ggacggcatc cacatggggc actc 474

<210> 5428  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-E2  
 <400> 5428

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 cagcaccagt tctgggcggc ggcggttttag gcagcggctg cgacggcgat tcccgcattg 120  
 gcgggtggtga ttgaggctcg cggttgctgg ttgagcctgg tggcggctgc gctgtgaact 180  
 ccagttcatc ctttactgtc aacgttaccc tcagcccggc aagttcccaa gttggcggaa 240  
 ataaaagagc aaagaaagtg ccagcaaagc taccagacta gtgcttggtt gttgctgtct 300  
 gttcttatgt cagaccatgt gagaattcat gggtatcgtt gattgtaagc tatattcagt 360  
 attatttccc ttcccatctt agtactttgt cagactatgt tcaactaaat tgggctcaga 420  
 acatgttcaa ctaaactcaa tacaatgccc cc 452

<210> 5429  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-E3  
 <400> 5429

cgcctgcccg taccggcccg aaattcncga gtcgacggga ggctgccag cccaatcagc 60  
 atcagagAAC gccgaaaggt cacaagatgg tgcagactga aggagcagac catacgaagc 120  
 agtagaggaa acataacgca ggatgcgctt aactgccgag agatgagtgg tacgaggtgc 180  
 atgcagatac tggcacacac gggtgactgc ataagagaca tcaggtctgg tgatagttag 240  
 atattgcaga ccaccaacaa ggctgcgata ctcagtggca tcatcagtgg aaagaagatc 300

ccatcaaggg cagacaaccg gtcagtggca gacatcggag tgatagcatg tttgcattgg 360  
 agcatcccag caccgcccag caaatccgtt gagtactttt tctgactcaa agtccaacca 420  
 gtagaagacc gtgacacctc caatccaaga aaataatgca aagcacca 468

<210> 5430  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-E5  
 <400> 5430

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 tgcagctgct agccacgctc caaatctacg cagtgccatt catgactttt gtcacaacaa 120  
 ctaagatctt cacgtacatt tgtcgtcctt ttagatcct gccacaatc agttctgaca 180  
 tctattattc tgacaattct tctataaata ttattttcat gccacaattc aacttcgcgc 240  
 ttcgtagaag tgggtgcgcca ttaaataagct caactactaa cgtcgcacca caccaacggg 300  
 gcgctataat aacttgtagc ccacgttctt agtgtaacac cgtggatgtg gtgcccatt 360  
 ccttttcgct ca 372

<210> 5431  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-E8  
 <400> 5431

ccggtcctga attcccgggt ccacgggtac cacactatgg acttctgcta gccagagtgg 60  
 ccggcctacc tacttcagtg atcgacaccg cgaccagcat cacttcacgt atcacagagc 120  
 aggaaatggg taggatggac gcgaactgcg tgcagtacca gccgctgagg atggcgtacc 180  
 aggccgcgca accggtcctc tgcttgaagt actcaaacca aggggacgac tacatccgtg 240  
 aagcattgca ggacctcaag gagagttacg ctgcaggcaa tttgatatga aacaacaaga 300  
 gattacgtct ccaggaattt gatagaggtc tgttttagg tctatggccg cagaggatcc 360

atcagtctta tttccatccg ccgctgtaat tatatattag tcagagtccg atactgaaag 420  
 tggcgatanc ggagagatcc cttattacac acagcacacc tggagt 466

<210> 5432  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-F10

<400> 5432

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 gccctccca ggtgttcttg ccctgacga ggcgtagggt gattcgggtt cacctatcag 120  
 cttgctgcgt gccctttgtt tgggatctca tcttggtcta acgctggaac gttatatgtc 180  
 ccaaggaaac tttagatag gcttgtcgcc aatttttgtc agtaaatgag tcgtgaataa 240  
 ttatcaactt gctctgtgcg agtgaagtga tgtgactgga atttaacgta ccccggtgga 300  
 tgtgtatggg tttaagatct gcactcttgt gtgctgcttc cttctgtgtt ttttgctttg 360  
 cttattttgg aataaatttt tgtc 384

<210> 5433  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-F11

<400> 5433

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 gtgcgagact aattatttct tcgtctgac accgtatgat cggcgtgttc atttggtgtt 180  
 cacttgtgct tctgactgaa gccgcgtgtt gtacagaata cagagctatg aagaaacca 240  
 tttcgccgtg attatttga taaaaaaaa acaaaaaaag aaacgcaaga ggcgcaaagc 300  
 gcaagcagac gcgggaaaga gcacaaagca aaagacaaaa gaaaaaaaaa aaaaggggcc 360  
 gctctaaagg tttcaggctt acgttcccg gaatgcaact tcataccct tcaaaagggt 420  
 caccaaaatt caattcacgg gccgtcgttt taaa 454

<210> 5434  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-F2  
  
 <400> 5434

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 cgccgggcaa cttcttggtg ggcgcgctgg agctgtcagg cccctgcacc ccctccatca 120  
 tcatccggct ggacggcaac ctctcggca ccggcgacct caccgcctac aagaagaact 180  
 ggatcgaggt gatgcgcgtg gacaacttca ccatcaacgy ccacggcacc atcgacggcc 240  
 agggccccct cgtgtgggag aagaaccagt gcagcaagca ctacgactgc aagatcctcc 300  
 ccaacagcct ggtgctggac tacgtgaaca acgcgacgat ccggggcatc acgtcaaga 360  
 acgccaagtt cttccacctc aacctcttca agtgcaagac ggtgctggtg gagaacg 417

<210> 5435  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-F6  
  
 <400> 5435

cctgcaggaa ccggtccgaa attcccgggt cgacagggac tggcctccaa gggccaagcc 60  
 cctggagaga tcgtaagtat ccggactccc gaataacttc atggtttttc tttttgccac 120  
 ataatgtctt tctaattgcc catacaaccc tgcagtccgc ccaaggatga tcttcccgt 180  
 tcgtcgcatt ggtccttagg tgcgtcggat atggattctc ttccgactgc ctccaccccc 240  
 cgtgatgcgg acgatgccga ggtgggatcc cggaaggta cccactcgga ggaggaggcc 300  
 ccggaggtgt cgctggacaa cctcccggac ttgacacgg actcggcccc ggaaccata 360  
 gtggctccgg agtcggggcg gcgaccctt cgtaagaagg gcaaagacgt gacg 414

<210> 5436  
 <211> 481  
 <212> DNA  
 <213> Triticum aestivum



<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-F8

<400> 5436

ggctccagaat tccccgggtcg acggggagtag ttagtgaaat acgtattgtc ggctataaag 60  
gagaagtggc ctgagagcaa tagatggaat accatctacg tacagcagga caatgctaag 120  
actcatataa aaccagatga tccacttttt ttgcaggaag ctgctagggg tggttgggat 180  
attaggatga tataccaacc acctaattct cctaacacaa acatattaga tcttgggttg 240  
tttgccctcaa ttcaagcaat gttccataga aagatgccca agaccctagc cgagattgtc 300  
caaaagggtat tgcactgatt agatcttggg tgggtattctt tttatgttct atgtgatata 360  
tacctatttg tgtatgaact gttttgagtt tttcatgtca tgtgtcatan gttaattaat 420  
ccctagctga gtaccccatc aaaggctcaa taggatctgg ttgagtcac aagcgtgcat 480  
g 481

<210> 5437  
<211> 441  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-F9

<400> 5437

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gcgtgaagga ctccaaagat tactatggat tggctcctgg taaatctgcc ctgctgaggt 180  
atgcattccc gataaaatgc acagagggtta tttatgggtga taatccagat gatattgttg 240  
aaattcgagc cgagtatgac ctttcaaaga cctctaaacc taagggtgtt ctgcactggg 300  
ttgccgagcc agcacctgga gttgagccgt taaagggtga aataagaata tttgagaaat 360  
tattcctctc ggagaatccc gccgaattga aaaactggct ggggtgaaatt aaccgcact 420  
caaaggaagt aatcaagggc g 441

<210> 5438  
<211> 468  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-G11

<400> 5438

ccggctcctag attcccgggt ccacgggaat tttggacatg gcaggctcag tcgtggttggc 60  
gaggcaggcc ccagactgcg aggtggttgg ttggaagct cgaggatgaa cagtggaagg 120  
caggggagga gacgaagagg caagtgtgaa tcgaggctga aaatttggga acttgccctc 180  
tgagagctgt ctaaaagagg aaacccgaat cgctggttgg gctggtccta tagctcaagc 240  
ctcaattggt ggaaaaggaa aagttggtaa ctaaaaaaat gggcacaggc ctataagccg 300  
aggctcgggg caggcccagg ccatgtgacc caagttgcca cacccatagc aagtaattaa 360  
cctgtttgaa accctgggtt ggcgccctca actccctaata catagcgatc attaacctgt 420  
gtcgaagcac gagcattacc tcctgggtcac acagtcaaag cactttgc 468

<210> 5439

<211> 307

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-020-Q1-E1-G5

<400> 5439

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acaccgacgg tgacggcttc atcgacttca acgagttcaa ctccttccgc aacgccaaac 120  
ccgggtcaa gaaagacgtc cccaaaggcc tccgaatcaa ttcaattcaa ctcaaccgtc 180  
cgattcaaga accgattcaa ccacgtacgg gttcctataa caatttcaag caactaccta 240  
caccggtccc gattcaacct caacttcacc tgaaggcggc cctaattttg tttgatcatt 300  
ttttttg 307

<210> 5440

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-G7

<400> 5440

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 gctgctggag cttttctccc tccgtgcacc caacaagcct ttgtgcaaaa tttgaaccag 120  
 acattgcttt tgtagaatta tcgttgctta gtattacgat tctctaaca ttcgcgcgcg 180  
 tatatatctc ccatacttat atatgtacac agtgtatata tcgcgccac atgtgtacgc 240  
 atacaatatc atagagtata ctcgacaaaa aaaaaaaaaa aaaaaaaaaa aaaagcgggg 300  
 gcgctctagg atatacagc atatatacgt gtatatgaga tgatcatatc cctctagagt 360  
 gtcacctatt cacatcaca 379

<210> 5441  
 <211> 479  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-H10  
 <400> 5441

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 ggcacttctt ttctactgga atgagatgaa ccgacagggt agagtagaag ggtcgggttca 120  
 gaaggctca gaagaagaat ctgagaagta tttccacagc cgccacagtg gaagtcagct 180  
 tgggtcaatt gttagcaagc agagcactgt ctttctgga agagaagttc tccaacaagc 240  
 atacaaggaa ttggagcaaa aatattctga cggtagcttc atcccaaac ccgattactg 300  
 ggggtggctac aggttgacat caaatctttt tgagttctgg caaggccagc agtctcgtct 360  
 gcatgaccgg ctacagtatt cacagcgaga attaggtggg agtacagaat ggcacatcca 420  
 aaggttgctc ccttgatcag taacctcctt aaagctctcg cctcgtgggt aataaaagg 479

<210> 5442  
 <211> 376  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-H12  
 <400> 5442

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 caaggccaag gactcaccgc cagacccccg ctcgccaacg gcaggtctgg aatgttgcca 120

atgtcagagcc ctccagcaaa tccaggacag cttaccattt tttatggtgg gtcagtatgt 180  
 gtgtatgact cagtgccacc agagaaggct caagcaatca tgctcattgc agcagcagca 240  
 gctgcgccct caaaaagcaa tggcaccgct gctgttaagc ctccagcgat gtctgcgacc 300  
 aatgctatcc aggccatgcc taagcggctg ctctcacttc agagcacttc tgtagcagat 360  
 ggacaacctc aggctg 376

<210> 5443  
 <211> 471  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 5443

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 gtcaccttcg ccactgccgg tgcctgacat tgggatggag ggggagggga acaaacaggg 120  
 agcggagtggt aagcggcgaa gatggaagca aagagtgaag tggagctagg gtttgctccg 180  
 ggtgggggatt ttagtgggga tagagtgggt aggtatgggc catggtgggc aggctgacgt 240  
 ggcagacgcg tctaggccac cccatacccg ccctagattt aggctggggt tgaggggtgc 300  
 ctgtcagctc gaatggccat gtttgggtata nggagccga ctcggtcaaa ttttagtgac 360  
 agtgcattga tcaggccatc taccgggtca gttttggcac ggaccggggc gtccaccatg 420  
 acgtagttgc cacggtaggg gttgccgggc accatacacg acactagaga g 471

<210> 5444  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-020-Q1-E1-H9  
 <400> 5444

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 gggggctcct aagtcgggga tggccctgat taccaacttg taacaccac gatgctggcta 180  
 tatctccac gtgtcgtagc acgacttaga ggcataaccg cattgtgggt ttgtcgcaag 240

aagtgtcatc ttcaaacaat cccaagttat gaacaagaaa gggataaata gagttggatt 300  
acaatcgcca cttcacacaa gtacttaaata aaatcatata tcattcagag tacacacata 360  
gtccgactac ggacgaagcc aaaagaaaag aagataaccc aactgctaga ttcccgatcg 420  
tcccaactgg gctccactac tgatcaacat gaaacg 456

<210> 5445  
<211> 469  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-021-Q1-E1-A6  
<400> 5445

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tcatctacgc ccgcgccaag cagtacgccg aggagtacga tgcccaggac aaggagttgg 120  
ttcagcttaa gcgtgaggcc cggatgaagg gtgggtttta tgtcagtcct gaggccaagc 180  
tgctgtttgt tgtcagaatc agaggtatca atgccatgca cccaagacc aagaagatct 240  
tgcagctggt gcgtttgagg cagatattca atggagtgtt cctgaagggt aacaaggcca 300  
ccatcaacat gctccgcagg gtcgagccat atgttgcata tgggtacccg aacctgaaga 360  
gtgtgaggga gttgatctac aagagagggt atggcaagct caacaagcaa aggattcctc 420  
tgaccaacaa caaggtcatt gangagggtc ttggaaagca caacatcat 469

<210> 5446  
<211> 467  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-B6  
<400> 5446

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ttgtgatgca cagtgtttgg ctccggtaca tcacagaggc cggcagcaag gaacacagct 120  
tcctgccctt gcctctgtaa atcatcaagg aggaaaaatg tgcaagatgc ttgaagtttc 180  
cccttgaaac gaaggctctg ggcctttgtt tgtacatata ttcccttgat ttgtactgac 240

tctccaatta attattcaga gagctatggc catacaagga aatcaaaagt ttcagttgca 300  
tgtagcaagg aaggtcaatt tgacacggcg gtgctgccat ttgccccctcc cttctccctc 360  
gaaaatgtgg ttgacgctcc ccagatcttc aggttgcattg acaagatttt tttcctgtgg 420  
aacatattgt gtatcttcca tcggatcatga gtaaattcaa atcaaaa 467

<210> 5447  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-021-Q1-E1-B7  
<400> 5447

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ttatgttttg agtaagcttg caacaccacc acatgctatt aatcctgata tgtcgcaagt 120  
aattaatgat gctacttctg ctatgaatga tggtgatgat gatgctagta cttttcttga 180  
taagattgtg ccactgggtg aatctcttga tgaacaactt gctagatcta aagaaattga 240  
gaatgctgaa accaatgaaa gtacttaaac tgatgaaatt attgaaactg gaaattttga 300  
ttcacctatt ggaactagtg ccactagata tgaatttcct gagatacctg agggatcatgt 360  
tatggatgga gaagtagcta gagactttct tgcttgtaag gatanagatg atcttaaaaa 420  
attactacgc aggctgaaag aaaaatcttt g 451

<210> 5448  
<211> 466  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-B8  
<400> 5448

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tatattagtc tttgcttttt agtttaccac aatcatcctt tctgtacaca ctttttggga 120  
gaaaccact tgattagaat ttattagaat atgctatgtg cttcacttat atcttttggg 180  
ctagatagtt tttgctctag tgcttcactt atatctttta gagcacggcg gtggcttaat 240  
ttttagaaa tttctagtct ctcatgcttc acttatatta ttttgagagt ctcttagaat 300

agcatgggat ttgctatggt tatgaatttg gtcctagaat gatgagcatc caagttgggt 360  
 ataataaaca ctatcatagc aagtgcatta aacactagga tcaatttgat gcttgataat 420  
 tgttttgaga tatgaaggta ctagtggttag agtcatgcta gtgggt 466

<210> 5449  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-B9  
 <400> 5449

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 tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaatag 180  
 ggtagttca tcatatccga accaatctga gcctttgcat aatcttttta gggtttttgc 240  
 tttgttgaat ttgcgggtgc atcgctgtgt caagttgctg gtcttagagt ctagtctttt 300  
 agagtttcga gttctgggtca taagttgtca cgccgccgcc gcaccatcat catcgccttg 360  
 ccatctacca ccattgctca tccgccaccg ctctgaatcc gtatctatat accaccaccg 420  
 atccgtatcc atataccact accgctacca tatacc 456

<210> 5450  
 <211> 486  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-021-Q1-E1-C4  
 <400> 5450

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 taacgttacg atgacagtta tattatgagt ttatatgttt tgatgtaccg aagggtgttc 180  
 ggagtcccg atgtgatcac ggacatgacg aggagtctcg aaatgctcga gacataaaga 240  
 ttgatataatt ggacgactat attcggacac cggaagtgtt ccggagaagt ttcagataaa 300

accggagtgc cggaggggtt accggaaccc cccggggaag tattgggcct tagtgggcct 360  
tgaggggaga gagagggcag cagccaggag gtggcacgcc ccctcccatg aggagtccta 420  
attggactaa gggagggggc gcagcccctc tttcccgcgc nctctccctc tctttccttg 480  
ccccct 486

<210> 5451  
<211> 469  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-C5  
<400> 5451

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agcaactcga ttcgtcggaa gtgcagaaac aagatgatgt tgtaacatc atggaaccgt 120  
ctgatgctga gacagaactc tctaattgctg agacggaacc ctctgatacg gagacagAAC 180  
cctctgattc cgacaatgat ttgccaatgg aagaaacaac agaaactcct gaagaagatt 240  
tggatgacct ccaaattggaa gaaacagacg atccttctga agaagaattc gatgatgacc 300  
ttgtgatcaa cattgctcct cgcaaggcca acaactcagc tgcccagtta aatagggcaa 360  
accaagcagt gaataaggac gagcgggttca gaaaacgtca gcactttgat gagatttctc 420  
cacaaatgaa gagacagaaa cctgaggatt tatctgaacc tagaaacca 469

<210> 5452  
<211> 470  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-C6  
<400> 5452

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agaacactag gatgactatg gaacggggccg ctttgatgac tcaggcgcaa cgaatccaag 120  
ctgattcctt ccggtctctc ttggatcaga acgcttcaaa cgaagtcttg aggagaaggc 180  
accggagtgc tctgcgcgcg gtttacaagg tgaggaacct cttcaacaca cctagtgtag 240  
ggaccagtga cccgccaggg gtaaattcagg cagtagccgc gcttgggact ggagcgcgcg 300



ctcaaccgtg catgacaggc cgcgccagtc agaataatat cctaccacaa cacgtgccga 360  
caccaccggg tcattactct aaccctttgg ataacatgat cgttgtgatg tcgtgactgg 420  
cggatctccc agttgaaggc gagtctctag cggcgggtga aacgcggaag 470

<210> 5453  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-C7  
<400> 5453

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ccccttcccc ctatatatac ttgaggtttg gggctgccat acacatgagt tctctccctc 180  
ttggtgcagc cctacctctc tccctactcc tctctcccc tgggtgcttag cgaagccctg 240  
ctggattgcc acgctcctcc accaccacca cgctggttggt ctgctggttg atggagtctt 300  
cctcaacctc tccctctctc ctgctggat caaggcgtgg gagacgtcac cgggctgtac 360  
gtgtgttgaa cgcggagggt cgcgccgttc ggcacttgat catcggtgat ctgaatcacg 420  
acgagtacga ctccatcaac cccgtttact tgaacgcttc cgct 464

<210> 5454  
<211> 466  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-C8  
<400> 5454

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tctccacggg ctctattca accaccctt catgggctat tgttcatcca gccctctacc 180  
gtctactatt catccagacc tccacggggg ggtcctgttc atcctgcctt ccatggggtc 240  
ctgttcatcc agccccaact ggctcgatcg atcgggggtcc tgttcatcca gaggcaacac 300  
cacgggggtc tattcatcca cccacaccag gaactgttca tccaaccccc ccagcaacgc 360

tcactgttca tccaaaggca gtatcgatcg gcttcagtta gcagcagtag cgaaggaatc 420  
gttcgatcga gttcagttaa cagccatcga ttaatcgctc gggttc 466

<210> 5455  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-021-Q1-E1-D11  
  
<400> 5455

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gagtcagtac ctccaactcc gtccctccaag tcgacaaaaa gaaatggcat ttaagtgtga 180  
tatcttctga gatgcaatta caatctattc tctctctctt ttcttccctc ctcaaagagc 240  
tgagactttg ctcaattgag catcaagctt tagggctctt tgtaaatctt ttttacagtt 300  
tccaatttgt ggtagcaatt gtagtatatg gttctcctgt tctattcacc aatagaagca 360  
caaaaagtga cagtaacact cttacagtgt tgctttggga caagcatacc atcacctgca 420  
aaaaagatct tgtaagagcc anagctatta taggatga 458

<210> 5456  
<211> 465  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-021-Q1-E1-D5  
  
<400> 5456

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ctagggggag gggccgcacc cctccttcc ttcccttctc tcttcccttt ccttctctcc 180  
tactcctact acatggaagg tctcctagtt ggactaggaa aggagggagt cctactcgtc 240  
ctactcccgg tgggagtagg actcctccct ggcgcgcctt cccttggccg gccgccccct 300  
cccccttact cctttatata cgggggcagg ggggcacccc ataacacaca agttgatcta 360  
cggatcggtc cttagccgtg tgcggtgccc cctccacca tattccacct cggtcatatc 420

gtcgcagagt ttaagcgaag ccctgcgccg gtggagcatc atcat

465

<210> 5457  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-021-Q1-E1-D6  
  
<400> 5457

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aacgcaaggg aaacaggcag gcgtttccga tccagtgaat cagtgtctggc tgccaaactt 180  
ttgaaagagt agattgtttt cagaagagtc tggctgttga gctgagtccc ttcttacttt 240  
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atgatatggg ttagttttcc catttgcaca gcaagctatg acacccccct gtgtttcttg 360  
gaagatttcc ttttttattg gaagacacga tgatcctcca ttcctcctgt tatagaagtg 420  
caaagacgtc ttaaaaaaaaa cagagaaaag tgaaaaca 458

<210> 5458  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-021-Q1-E1-D7  
  
<400> 5458

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gggcgcctgc tgcgtcctgc acaacatctg cgagatgcgc cgcgaggagc tcgagccgga 120  
ggtcccgttt gcgctcttcg acgacgacac cacgccggag acccctgttc gctctgagac 180  
cgccaagcag gagagggaca gcatcgcgca caacctcctc caccgcggtt tcgccggcac 240  
cacatttttc tgatcaaata acctcctgcc ctctccttgg cttggtacag ataaaaaatt 300  
aaacatgtag cgaattcttt tagccgctag gatagaacat tttgttagga tttgtacacc 360  
acgttcagag aaactggaaa ttcattgtaa cattctgtgg aaaatttcgg cagtacctgc 420  
tgtcggttac tcggtttatt gtttaaagat atatatacaa tttta 464

<210> 5459  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-021-Q1-E1-D8  
  
 <400> 5459

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 tctcgcctta tcatgacagt cagtttttagc tttctccact gaggcgctcg cccagctcaa 120  
 ccggggctca atcgcagtgg ttctcccagt gctaccttag ccgacagaat ggaacgtaag 180  
 gtacaaaaac atgggagccg ggcaaaccga actattgacc caaaacatga ttcggagccg 240  
 atgcatataa tgctataagt tcgggggtgcc gcacttgtga aagtgttcgg acttatcaca 300  
 ccataatgcy gggaacacaa gcccctgggtg tattctgccg taccaaaata tacgggtgca 360  
 agatgtcatt aatgaacata tatgtaaaaa aggtaatgca attataggca aaaattgatg 420  
 cattgtttat tcaagagatt ctgccatgag tgcagaacga tacaatag 468

<210> 5460  
 <211> 469  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-021-Q1-E1-E8  
  
 <400> 5460

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 gcgaacgtgt tctacggata acagccgggc accccgcgac ggttgcccat cttgtgcggg 120  
 agagacactc gcacttgggc tccgctttcc atgcgccgat acatacatag atggcatcgc 180  
 gggttaggga aactccaacg aggacacca attctgcatc cctaaatatc cggaccgaat 240  
 agtctggaag accgtttggt catcaatcca atgggagtca ccaaatatcc acggaccagt 300  
 tcggatgtcc ggaatcccac ataaaccgaa taggattgat ggggtgtgggg gtctcgccaa 360  
 aaaattgctt aacgggtcaa cggtacaatc gcatactcat attaaccact cgattacaaa 420  
 aaatgctatg ggagtagcat ccattagga catcgggctc aattcacga 469

<210> 5461  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-021-Q1-E1-F4  
  
 <400> 5461

aaaagccggt ggaatcgaaa aggcggagaa ggtgatgggc tggattaatt tgatggaatt 60  
 tccacacgga tatacaatag ccttctagtc tgaggtctgt ggtgttggtt gtggcagtct 120  
 gtgaccctt ctaatgtcag gcatgcagtg tacataacgt gcaacctgag attgttgat 180  
 taggagaaaa tagaatttgg acgctagtgt ccgagtttga gcagtatggc accatcaaga 240  
 tcccttgatga tcttccctca aaaaaaaatc ccttgatgac cattatgcag tggggcctga 300  
 ccagcctttt acgtttgtga gagtcgaatc ttgtgttgcc atgtggaatg tttgtgtctt 360  
 tgtttcagag caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agcggccgct ctagaggatc 420  
 caag 424

<210> 5462  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-021-Q1-E1-F5  
  
 <400> 5462

gtaccggtcc agaattcccg ggtcgacggg aggccggagt cctgtcagga tgggcggcga 60  
 ggtcgtggct tagaggggag aatgttagga ataagccacg catgagtatg tgctcatgtg 120  
 tgtgatctgc atgcatggat ggattagtta gctagctatg gagccggcgc agctgagtcg 180  
 cgtggcagtt ctgctggag gaagaatagg aagcaatagt tgaggcttgg tcctatacgt 240  
 gtgtatccaa agattctgga gacttggtcg ttaccaagc gtgtgtagct agcccggtga 300  
 gtactaatcg gatcaagcaa ccgtgggctt gaccatgcat acgtgtgtgc gtggggttag 360  
 tgggtgtgtg tgagtcttgt acttggtat ataagttgag taaatgaatg agaaaagtgg 420  
 ccgtgagggc tggat 435

<210> 5463  
 <211> 472

<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-F6

<400> 5463

ggtaccggtc cagaattccc gggtcgacgc tacgtaccaa acatacatag gtatacagag 60  
gactagctag acgcgctagc tacctagtag gcagacagga tatcggcatg aacaaatatg 120  
catacagaga gaagtgatat cgaccacctc tccttctccg agagattggt cgaacagaca 180  
agttctcgta tatctatcgg agactaccgg ctagatatag acaatagata tataatcgcc 240  
tacagtacgg acgcgtgggc tacatactat tctccgtctt cagcgatcac gtggtcaata 300  
aagaatgccg ccaattcctc ttgaattgct cgcgtgcgat ctgggtgctac gagttcatcc 360  
cgcatcagag acatctaatt ttaatacggg gggtcaatata tagatatata tatatggatg 420  
aatgagactc atcacaaatg atggtaacta catgaaactg tgaatactgt ta 472

<210> 5464  
<211> 463  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-F8

<400> 5464

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agtcttttct ttttagttta ccacaatcat ccttgctgta cacacctttt gggagaagcc 120  
tatttgatta gaatttgcta gaatactcta tgtgcttcac ttatatcttt tgagcttgat 180  
agtttttgct ctagtgcttc acttatatct tttagagcac ggtgggtgact tatttttgta 240  
gaaattatta gtctctcatg cttcacttat atctttttga gagtctttta taatggcatg 300  
gtatttgcta tgggtataaa attggctcta gaatggtagg catccaagtt ggggtataata 360  
aaaactatcg tagaaagtga attggatgct atgggtcaatt tgatacttga taattgtttt 420  
gagatatgga tgtagtgata ttaaagtcac gctagttggg tga 463

<210> 5465  
<211> 444  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-G6

<400> 5465

cgggctcgacg ggcaaactcgt aggaacaaca aaggaccgcg aagaacggtc agtcgtcgcc 60  
gagcgggatc atgatcacga gaaatatata tataggataa taaggtgggtg tattgccgcc 120  
atgtccgttg agctgatgtt tgtttcagct agagaaatcg ttacgcccgc tcataatttt 180  
tcgacgctat ggaaaataat aactactggt atatcactct atatcaaacc ggcttgtgaa 240  
ataaatgggtt gcgccccggt tttttgtcgt cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaagaaaa aagcggccgc tctaaaggat caaaactcga gcgtatctat 360  
gaggttccaa gcttaagtac ttctacatgg taagtcaaat tcaattcaca gggccaccta 420  
atttaaattc atgggcggta attt 444

<210> 5466

<211> 305

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-G8

<400> 5466

attccccgggt cgacgggacg ggagtaaagt tacgtggcca acttcttggt ttcaaaaggt 60  
ttccaaataa aagttcagtg tcatgacggt gggaagaaaa aaaatttgct gctcttaagg 120  
ctgcgatgac agtattgttg ttagttgtca gcatgttgca tcaactgtgtg gtgtatgttg 180  
gatgttggtg gaaaaaaaaa aaaaaaaaaa aaaaaaaagc ggcggcccca caagatgatc 240  
gatgcttacg tctctctgca tacgacatca tacctctact atgtcgtcaa ctatcttcac 300  
atcgg 305

<210> 5467

<211> 414

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-021-Q1-E1-H12

<400> 5467

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 agcagtagct acagccctgt cggctgccgt agacgccctc tcggtggaag cggctgcgct 120  
 caatgcggat gtggcggcac tctcggtgta ggcggccgag ctcttggtgc aggcgcggcg 180  
 ctcggggggg ggggggcgcg gccatcgtac tggccttcac gaagcgtttc cacgacgtca 240  
 tctttgcaag aagggggtgc gggaatggg atcaggattc atggattcgg gggttgccgg 300  
 aacaggagta nacgagccgg cgaagcttaa agagggagac ttaaatagac ccagatattt 360  
 tcatcgcaaa cggttcctag aaaagaactg tgtgtgatgt cgtagataat tttt 414

<210> 5468  
 <211> 469  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-H7  
 <400> 5468

taccggtcca gaattcccgg gtcgacgggt tcggcctctt cgctcgacc cacggcgagt 60  
 ccccgccgat gcaggtgagc gcgagctact acggcgccgc ggagctcgac cgggccaccc 120  
 atcagcacia gctgggtcaag ggagacgaca tcgagggtga tcttgatcac atgcacatgg 180  
 ggggtgggcgg ggacgacagc tggacgccgt gcgtgcacga ggagtacctg ctgtcgccgg 240  
 cggcgagcta caggttctcg ctgcggctgc gccccctgtc gccgtcgtca tcgtgccacg 300  
 acatctacag ctcccggcta cctaattgat cgteccatct gtctgatgtg gccgtcagag 360  
 gtgcgtctga gagagaaaga acattcgaga gactgaaaca atactgtccg agtcgctctc 420  
 gtcgtgtaa acgtaagaag actgtaactg gacagggtacc tgtcaataa 469

<210> 5469  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-A1  
 <400> 5469

taccggtcca aaattcacgg gtcgacaact tttatctagc atccagtcct acaaggtagg 60  
 gggatgcaag aacagagggg caagatccaa gtcacgggtc gcaaacactt ccataagggg 120



ggcaatttttt gcaactagaa gattaggggg gaggtacaga gagggaaatc aactagttct 180  
 aaaactaaaa gaagttcatg gccagaaaat tttggaacaa caccttttac ctttttgttt 240  
 tcacttggga aacttgccca actatgccaa ttttttttg caattctcca gatttatgc 300  
 ctggtcagca cggagaattg cagacacatt tgcgttttca aaaaaatatt cccacagatt 360  
 ttatgtcttg atttctcgtc ctttttacta tgtttttcaa tgtgcaagga gagctcccca 420  
 acg 423

<210> 5470  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-A11

<400> 5470  
 gggtcgacgt tgaatgcta gattttaagg acttcctcca gagcaaccta gtcaaattca 60  
 ttactgtaga ctttggtaat gacaaagaag tcctgggtcg gataggcctc gttgtaggca 120  
 acaccttcga cctccagaag aattggctgg tgcctctcgc tcagccttca atgctgaccc 180  
 tggcaggagc catggttcat ccttcgtacg gtaaactgga gaaacctcca tacacatttc 240  
 atcgttatgc atggcagcag aatgtactag atatagacca catccactac cctgcaatgg 300  
 atggctacct ttgtttcaat atctacaagg gttggatgaa gagcaagagc caagtgtgtg 360  
 gttcaagcaa agaagtatcg tccaag 386

<210> 5471  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-A2

<400> 5471  
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 ggagaaggat gagaaaaaga aagaagatgg cgacagctca caaaaggaga aggccaagac 120  
 agggaaagat aagaagagcg agagcaaaga taaggataaa attagcgtca aggagactgg 180  
 atctgatgca gatgacagta cccccaagaa caaaaagaat gataaggaca atgcaaagaa 240

gaatgatgaa agcgatgaaa aacaagagaa agacaaagag aaggaggaac atgataacaa 300  
gaagaagcat gtagaagtgg gtcacgcaag agaaatcaag ctacaagata atgagtctgc 360  
gaacaaagaa actggtgctt ctgaagagaa gaatgatggc acggaca 407

<210> 5472  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-A4  
<400> 5472

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actcgaacac gtccagaaac gaccacacga agtagccctg cacgttcgac ccgttcctgc 120  
tggtatcgag ggtctcctcg atgtaatcct gcaggtactg cgacctgaac tcgtcgtcag 180  
gggcggtccc agcagacgga tcagcaatgc tagcagctcc gttctcatgg atcatgacta 240  
taggggttctt gtatttgagc tggagatgct ccagcatttt ctgcagagcc cacgggttctg 300  
atgtcatgaa atcgcttttc aaccacagaca ggagctggtt cttcttcaaa actggcatgt 360  
catagttcac tgatgcatca cacatgtaat ctctcagctc atcatccagc ttgctaagat 420  
cagccttcac atataccgca atgta 445

<210> 5473  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-A5  
<400> 5473

attcgcggtt cgaccgagc ggaaaactca cctacggcgg ctactccagc atggtggtgg 60  
tgcacgagcg cttcgtggtc cggttcccgg acgcatgcc gctggacaaa ggcgcgcccc 120  
tgctgtgcgc cggcatcacc gtgtacaccc ccatgaagta ccacgggctg aacgctcccc 180  
ggatgcacct cggcgtgctg ggcctgggag ggctcgggtc cgtcgccgtc aagttcggca 240  
aggccttcgg gatgaaggtg acggtgatca gctcatcgcc ggggaagaag catgaggccc 300  
tcgagaggct aagcgccgac ggcttcggtt tcagcaagaa cgccgacgag atgaaagctg 360

cgatgaacac catggatggc atca

384

<210> 5474  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-A6  
  
<400> 5474

attcccggtt cgacgggaaa ggcattggaga actttccaag aaagaaagtc aaattacctt 60  
atgaatctat catgcgtgct acttatgaat ttaatgccga agatggcact cgtagatct 120  
atctttgttt ttatgcctag ctaggggcgt taaatgatag cgctagttag gaggtaaccc 180  
aattttcttt atgttttttg ttttggctcc tgtttagtaa taaatctagc atctaccttc 240  
tggttagatg tgtttttatt ttttaattag tgtttggtcc aagtagaacc tataggataa 300  
cctacgatga tagttgattt gattctgctg aaaaacagaa actttgcacg cacgaacata 360  
attttgtaa ttcacaggaa cgtgattttg cgttga 396

<210> 5475  
<211> 287  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-A7  
  
<400> 5475

attcgcgggt cgacctgga gtctacaagt gtttcaggat gctcaagta attgtcagga 60  
ataacgaact gcgccacatc tccatcaaca tgatgtccaa catcgacgat gtttctgttg 120  
gtctcaaatg cttgcggcac ggggcagcag tgtaactggt caagccgctt cgcattgactc 180  
atctgttgga actctggacc catgtgtggc cagttagaca gcagcttgga taggtccata 240  
aagatttcgt caatgtcaat cgtgacttgg ggctgtctgt aactaat 287

<210> 5476  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-A8

<400> 5476

taccggacca gaattcccgg gtcgacgggc aattcatcag atcttgacaa acacaccgca 60  
aatgaagatt acatcgaata gatctccaca agagaggggg agaactagta aaatatttta 120  
tgaacaatag ggaagttgga atacagtaag tttaaaacca atattaataa agagcgagtt 180  
cagtacagta ccttgaagtg gtgttttggt ttctttcgct aacggagctt atgagatttt 240  
ctgttgagtt ttgtgttggt aagttttcaa gttttgggta gatatttgat ggcttatgga 300  
acaaggagtg gcaaaagcct aagcttggga aagcccatgg caccocgagt aatctaagga 360  
caccaaaaag cctaattcttg gggatgcccc ggaatgcac cctcttttcg t 411

<210> 5477

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-B4

<400> 5477

ccggtccaga tattccgggt cgacgggaga gtangagaca aacctaacaa gacatagaga 60  
gagagataga gagagaaaga gagaggaaga acttaggtct gtgagaaaga tggatacatg 120  
taatatacat gagatgcatg tgcattctgga ttctgtatac gtggaagggtg aagagacaac 180  
atgtttggtg agagagctgg aaaaacatgg aacagagggg aaagatctcg tgggttgagg 240  
gattgacaat ttatgctggg ggagagaggg attggtaatt ttgtgcaaga gagagagaga 300  
gagggtgcgg ggaggagtga gtcagccgtc gtcacatcac cctgcttcca aatcgaccgg 360  
cattctctag cgcggtgtgg tcgctgtcct cgatctcctc gatgcctctt ttgaagattg 420  
acgtgttggtg catgttgggg tgaaaat 447

<210> 5478

<211> 185

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-B6

<400> 5478

cctatagtga gtcgtattac gggtaaaacg aagacgaaca ataggaacat gcaaaccaag 60

aagacgtaga gggagaaggc taactacagg aataagtaat agacgaagat atcgagcttc 120  
 aggaagcggg tcacgaagac gaatatgaat gtctcgaggg acatgcagac gaagaagaag 180  
 atgaa 185

<210> 5479  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-B7  
 <400> 5479

attcgcggtg cgacgggtag tcacattgca cgcacagtgc ataccaagac acgccaacag 60  
 cccgtcatgt agcaatcttc atgtgttttc actaatcatg gtctctttgg actcacggat 120  
 gccataaggg ccaaattgcat caatattgac acgttgcaact caaacgtgcc acttggggcca 180  
 acatggataa tgggtttttt actagcaagg atcacataag ccattatata gtgttggtac 240  
 cctagctaat aacaacatat atcaacattg gtcctagttg cagcttcaca ggaccactta 300  
 tgcattgtgc gataccatct tgaccaacac gcaacaacat tggcttcatt agattgatac 360  
 atgccataag gggtcctaat cattcaccaa 390

<210> 5480  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-B8  
 <400> 5480

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 cgggcgccgg agatgaagga gaaggtggag gcgtcgtcga tcgacctgga ggcggggaac 120  
 ggggagacgc tctaccgggg gatctcgcg cggggagaacg ccttcgctg gggcttcac 180  
 cgcaaggctc acggcatcct ctgcgcgcag ctggctcctca ccaccgtcgt ctccgccatc 240  
 accgtcttcc accccaccct caacgccacg ctctccaact cggccgtcct cgcgctcgtg 300  
 ctgcgtgtcc tccccttcat cctgatgac ccattgtaca tctatcagca cagacaccct 360  
 cacaatcttg ctatcttggg tttgttctact ctgtgcttga gcttcagcat tgggtgtggct 420

tgtgcaaaca ct

432

<210> 5481  
<211> 242  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-B9  
  
<400> 5481

gggtcgacgt tgaatgccaa gattttaagg acttcctcca gagcatccta gtcaaattca 60  
ttactgtaga ctttggtaat gacaaataag tcctgcgtca gatacgctc gttgtaagca 120  
acaccttcga gctccaggac aattggctgg cgctgctctg tcagccttca ctgctgacct 180  
tgtgaggaca catgggtcat ccttcgtacc gtatactgga gaaagctcca tacacatttc 240  
at 242

<210> 5482  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-C1  
  
<400> 5482

gggtcgacgg gtacatcatc ctgaggcggg accacacggg tcagtcttaa gtacggatgc 60  
attggacgtc atagtgtgtc tacaatggca cgtatcttca gctgatgtgg ccatcgttat 120  
agaagatcca gactgggatg tcgctgtctt gatacaaatt acgctgtctg tatcaaattc 180  
tcatttagac agatggatta acaccgaaaa gggtggcaac gttcacacat agtacgagtt 240  
gcacaccctg actgggtgaag aggacgcgcc ctgttgcaaga ccagtacaca cgagccgatg 300  
tggtggtcta tgccgagagt aaacgataca cttgccattc gggctaata cgggtacttt 360  
cgctttccac gcttcttttc tcgg 384

<210> 5483  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-C11

<400> 5483

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gcgtcacagg ttaaacaggg ggggttagtt tagtttaatt aaaaattagg gcactacggc 120  
ccacatgtca gtgtcagcag gggggtaatt aaattaaaat aaactaaact aattaacagg 180  
ggggctggcc ccacctgtca tcgacccaag gggggtcaaa cccctgggtca gcagggccta 240  
acctgccggc ggcttgacgc cagcgaggcc gagacggcgg acgccttcgg acttcttgct 300  
ccggcgggtca aaccgggtga tgaaggcgtc taccttgagc tgtgactccc ccgcatccat 360  
ctgtgcaaac gtcaggggct gaagtggccc aagctc 396

<210> 5484

<211> 236

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-C2

<400> 5484

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tcataagcac atcagcatca agctggatga gaacttaaac tgggtacaat atgtcatacc 120  
gagtggttgc ctacatcagt aaacatgagg aatgctgcac atgctagcac ttaaaattaa 180  
ttgaatctta ccaatgttct aacgtacccc ctgtcatacc agagttattg tcttgg 236

<210> 5485

<211> 430

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-C4

<400> 5485

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tatacttgca agatactcat agtaaaagct atccttgaaa tttttattga aaatagagat 120  
gcaaaacatt attataaata acatcaggca aatactaaca aaagaaaatg acgctccaag 180

cataacacat atcatgtggt gaataaaaaat atagctccaa gtaaagttac cgatgagcac 240  
agacgaatga cgtgatgccca tccggggcat cccaagctt acgatcatgg atgtccttta 300  
atactacatt ggggtgcctt gggaatcacc aatcttaagc tcttcgcact ccttattcca 360  
tagtccatcg aatctttaca caaaacttga aaacttcaca acacagaact taacagaaaa 420  
ctcgtaagct 430

<210> 5486  
<211> 462  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-C6

<400> 5486

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accacaccac ctacagagtt ctgttgccca atatcaacaa agctaatagca tgatcctgtg 120  
ataataacat ctggacagac ttacgaaaga gaatatattg agaaatgggt cagtgagggga 180  
tacaacactt gtcccaagac acaaaaaaag ctagaaaact ttgcgatgat tccaaatact 240  
tgcatgaggg atctcatttg caactggtgc agagagcatg gtttcacaat ctcagatttt 300  
cttccaagca aagattccta cagttatttg ccagagcaat tgcatggtca ctctatgtca 360  
agtttgcaca atgtttcagt acctctaatt gctgggaatg ccaggaattt tgtgattgat 420  
cacagcagtt catctgtcgc gttttctgat gccagttatg tc 462

<210> 5487  
<211> 401  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-022-Q1-E1-D1

<400> 5487

ggtccaanaa tcccgggtcg acgggaagga ttccacctat gagctttgga cgacgggtgaa 60  
caatctcttc gcctcgcaat cacagtcccg gatcaccaat ctaaggatcg cgatcaccaa 120  
caccaagaag ggcacaatgt cgagctcggc gtatatggcg aagatgaaga gccttggggga 180  
tgaactggct gccgctggtc gtcccatctc tgatccggag atggtgaact acatactcgc 240



aggacttgac cgcaactacg actccgtggg ggcggtgatc ggcgctgtca agaacacaat 300  
caccgccgat gacctcttcg ctcagatctc cgcctttgat cagaggatgg agatgctggg 360  
agactcgtct tcaggcgggt ttcattcatc tgccaacgcc g 401

<210> 5488  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-D6  
<400> 5488

taccggatcg agaattcccg ggtcgacggg aggccggagt cctgtcagga tgggcggcga 60  
ggtcgtggct tagaggggag aatgttagga ataagccaag catgagtatg tgctcatgtg 120  
tgtgatctgc atgcatggat ggattagtta gctagctatg gagccggcgc agctgagtcg 180  
cgtggcagtt ctgctgggag gaagaatagg aagcaatagt tgaggcttgg tcctatacgt 240  
gtgtatccaa agattctgga gacttggctg ttaccaagc gtgtgtagct agcccggtga 300  
gtactaatcg gatcaagcaa ccgtgggctt gaccatgcat gcgtgtgtgc gtgggggttag 360  
tgggtgtgtg tgagtcttgt acttggctat ataagttgag taaatgaatg agaaaagcgg 420  
ccgtgagggc tggataca 438

<210> 5489  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-D8  
<400> 5489

attcccgggt cgacgggggg tgagagtcac ctttcatcca caaccaaggc atacacaaac 60  
ctagacgggg agaaatcaca tatagtcaac acggcatggg caatgttggc actaatgaaa 120  
gctggacagg ccgaaagaga tccgtctcct ttgcacgaag ctgcaaggct tatcatgagc 180  
atgcagcttg gcaatggtga cttccacag gaggaatga ttggaagttt cttgaaaaat 240  
ggtccttctg gttatatggc ttatcgcaac atattcccca tatgggccct tggagagtat 300  
catagattag tactttgctc tggctaaatt agtaccttct ggtatgaagc acctaaatgt 360

tgctgctcct ctgctggcaa tgctgaaaga gcgatatctt gatttacaag tcctgaagaa 420  
 agaaacaaga agat 434

<210> 5490  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-022-Q1-E1-D9  
 <400> 5490

cgctgacgta cggctcgtaaa ttncggggtc gactaggtca aaccagacct gtgggaccca 60  
 tatgtcagcg tcacagggtta aacagggggg tttagtttag ttcaattaaa gattagggca 120  
 ctacggccca catgtcagtg tcagcagggg ggtaattgaa tgatgatact ctagacaagt 180  
 tatcacgggg gctggcccac ctgtcagcag ccacaggcgg taaaatccct ggccaacagg 240  
 gcctatgctg ccgctcgctt gcggccacca aagcctaaag cggggcgggc atctcacgtc 300  
 tagctctgcc ggtcaggaag tcgctgagg gaattttctt gaatccggga ctgtcttctt 360  
 cacaacggtg caagcttaaa tcgctacat gaccgtggcc cagaggagcc 410

<210> 5491  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-022-Q1-E1-E2  
 <400> 5491

cgggtccagaa atncggggtc gacgggatag gcgacgtcgg ctcttccccg cgtgagagcg 60  
 ataggacccc tgggacattc gtactggcat gcgtctgttg cctgattgct cacaacggct 120  
 gccgctccct ggacctcagg cgggagacgt tcgtcaccac tgtcccgtgc cagagtgcca 180  
 tcgagctcgt gtctatccca atcagagccc tgacgcatga cgcgagccg agaatgaaaa 240  
 tgcttaggat gtttgccacg aaagggtttt tactagctgg gagctgtctg ttgcactttg 300  
 ccttactata ggctacaacc ttgtgtcctt gtgctgtgca acttgtggca ctcccagatt 360  
 gcagtcaaag ttatggcata tggcgtaatg ctacactctg ttaactggaa aagatgcgac 420

atta

424

<210> 5492  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-E5  
  
<400> 5492

taccggacaa gaattcccgg gtcgacgggg ttgatgcaag ccctagattt agtctgatga 60  
catgcttgct aatcatcatt atcctgtttg aagactttac ttcgtacatt acattgaaag 120  
attaaatgaa caagtgcaat accacactgt gatcaaattc tgccttgggc tatggaatcc 180  
cggaacaat tgtactcagc tttctgtaat aatccctatc tgctgctagc atggcaacat 240  
tgaaaaaac atcagaaatt ctacttgagt gccttcaagt aatttagatt gtccaattat 300  
ttctgtcact ggatactctt tgtttttcac tgatcacgga tttgggttca gaagatttgc 360  
taatttaggt tacgataatg ttggactgaa gttatgatgg cgtgtttag ataaaaa 417

<210> 5493  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-022-Q1-E1-E7  
  
<400> 5493

attcgcggt cgacggggaa gatcaagctc caggcgggag gagacccccg ccgctcggt 60  
agatgagaga aggcactggc gcagtcattg tttagatatg aaagttttgg acaccgagcg 120  
gaactcagtc gagagcttat atatgaaaac tagtgagaga gagaagacta tatttatgca 180  
attagaagag aactatatac attgtttttc cctaagctca ataaggtctg tgtcctttgt 240  
ggactgcgtt tcttctttgt cgagacagaa catacactac cgaggattgc agtcaaatgg 300  
aacttcgatt caagttaaac ttttgcaata agtatatgaa gttcttttagc agtagctcta 360  
gacgatacag gcttacgtac gcatgcatg 389

<210> 5494  
<211> 403

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-022-Q1-E1-F1  
 <400> 5494

gggccagaaa tcnccgggtcg acgggggcact gcatgtttct aatcaccacg gttgatggcg 60  
 tgttctcatt tgcgcagtggt ttttaggcaa tatttggaag gcgttaatcc gtttagtacgg 120  
 ttcacctatg cccaagtgtc aaccagatcg cactagctaa atgtttttgg ttgtttatta 180  
 atgaattata aactttgtcg agtgcccatg ggaaaatact tgacaaagat aagacacttg 240  
 acaaacaatt tgaaaggaca tcgacccta attagggttt tgggtgtaat ggcaatagtg 300  
 agtagacgac taactatggt tcgagtatgc tttgagtata tacatcattg gaaatggaac 360  
 ataaagttcg tctgcgattc cctaagctaa aaggataaaa gaa 403

<210> 5495  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-F7  
 <400> 5495

taccggacta gaattcgcggt gtcgacctga agtacatggg agaggggggg tcctcgtcga 60  
 agtgcgagaa cgccatggcc acgtacgttg gctaccagca ccagagcca tgcgcctagt 120  
 cggccaattt gattctgggt gatgctggtg cgaccttaat ttaattctcc ttttcttctt 180  
 ctactaatct aattaatcaa tgtttcctgg acgaatttgt tgtttcctgt tgcttagatg 240  
 ttttgtgtgt gtgcggcatt agggagctgc caattgctgc atctacggag tactccctcc 300  
 attccaaatt actcgtcgtg gttttagttc aaaggagta cttgcctagt tgcccaatca 360  
 gtgaactcga tcgtctgaca agtgggccct gtgcttatgt tgacgattaa tgtg 414

<210> 5496  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-022-Q1-E1-G1

<400> 5496

taccggtcca gaattcncgg gtcgacgggt tgacatactt gctacttcct cttgctgctt 60  
ggataacttt gtagtccaat atgctttgtc caacatttag actttcccct tcaaagacac 120  
attgtctccg aaagttggaa gattctatat tttatatccc ttatcttttg agaaaatata 180  
tgtgagtga cctgaatgtg gatgtataag attagtagatga aaccacaaaa aatgcaataa 240  
tgcatactta catgcaaggc aaccattatc tttctaactt ataaaagaca atatattaat 300  
acaacatgt ttgatctcaa ctttctagaa atccaatgat agtaagcttg ttaggaaaga 360  
aacatatgat tagtttttagg acaaattggcc aaagttgtta tagaactggc atgtaataca 420  
cataacatga gatgttagtt aanctaattt tt 452

<210> 5497

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-G2

<400> 5497

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tgctttatct gttgcagaag aaattgaagg taatgctgag ctttcttcat attccgagggc 120  
tattatttct ggtgatagta ataagtggat gaccgctatg catgatgaga tggaatcact 180  
tgaaaagaat ggcacttggg atttagtaag attacctaga gagaagaaac atattcgttg 240  
caagtgggtt ttcaagagga aagaagggtt ttctcctaata gatgagacaa gatataaagc 300  
aaggtttagt gctaaagggt atagccagat tccaggtatt gactataacg aagtcttttc 360  
tcctgttggtg aagcatagct ctattcgcac tttactcagt attgttgcca tgcattgatct 420  
tgagcttgaa caattggatg taaaaactgc 450

<210> 5498

<211> 461

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-G3

<400> 5498

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atactattgc tcattgtgcc tcacttatat cttttgagct tgatagtttt gctcatagtg 120  
cttcacttat atcttttgag cataataatt tttgtcttag tacttcactt agatctttta 180  
gagcacgggtg gtggatttgt tttaaagaaa ctattgatcc ctcatgttc acttagatta 240  
ttttgagagt atttaatagc attgtaattt gcttaaagat aatatacttg gtattcaaga 300  
tatgtgaaac tttcttttga gtgcattgaa tagtaagata agtttgatgc ttgataattg 360  
ttttgagata tggaggatgat aatatcaaag caatgctagt tgggggtgatt atgaatttaa 420  
agaatgcttg tgttgaagtt tgtgantccg tagcatgcac g 461

<210> 5499

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-G5

<400> 5499

gtaccgggtcc agaattcccg ggtcgacggg aacgagagag aggaagccat ctagttacta 60  
actacggacc cgaaggtcta caaagaacta ctcacgcac atcggagagg caccaatgga 120  
agtggatgaac ccctccgtga tgttgcttag attggatctg ctggctctag actctgcggc 180  
ggctggaatt gatttttcac gattccccta tggtttctgg aatattgggg tatttataga 240  
gtaaagaggc agtccggggg gcacccgagg tgggcacaac ccaccaaggc gcgcctgggc 300  
ctccaggcgc gccctgggtg gttgtgctcc ccttgagaca tccccaggt gcttcttcgg 360  
cccattggat gtcttttggc ccaaaaaaat ccacaaaaag tttcactacg tttggactcc 420  
gtttggtatt gatttcctgc gat 443

<210> 5500

<211> 427

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-022-Q1-E1-G8

<400> 5500

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ggacttttcg gcaaggctgt tcctaaaacc gcagagaact tcagagcact ctgcacaggt 120  
gagaaaggca tgggcaacag cggcaaacct ctccactaca aggggagttc gttccacaga 180  
attatcccca gtttcatgat ccaaggaggg gacttcactc ttggcgatgg aaggggcggg 240  
gaatcaatct atggcacaaa gtctgccgat gagaacttca agctcaagca cactggacca 300  
ggctaccttt ccatgggcaa tgctgggaga gatnacaatg gatcccagtt cttcatcnac 360  
actgtaacca tgagctgggt ggacggcaag cacgtcgtgt tcggcaaggt gttgtctgga 420  
atggacg 427

<210> 5501  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-022-Q1-E1-H1  
<400> 5501

ccggtccaga attcncgggt cgacggggct gctcgatcgc ggtagtgttc gtgatctgcc 60  
tcttcatgct cgcgttcggg tggctgtggg gtccgctcgg gtggacgggtg ccgagcgaga 120  
tcttcgccct ggagacgcgg tcggcggggc agagcatcac ggtggccgtc aacctcttct 180  
tcaccttcat catcgcgag gcgttcctgt cgctgctctg cgccttcaag ttcgccatct 240  
tcattcttct cgctgcgtgg atcgccgtca tgaccgcctt cgtctatgtc ttctgcccgg 300  
agaccaaggg cgtgcccac gagcagatgg tgctgctctg gagcaagcac gggttctgga 360  
agaacgtcat gccggacatg ccat 385

<210> 5502  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-022-Q1-E1-H5  
<400> 5502

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aagctgagct cgttccagca ggagatcgtg cagctggcgg cggtgctgaa cggcgaccac 120  
cagctaagca gcctgcagga gaggatcagg gagaggatga acgtgaggga aggcacctcc 180  
tacatgagga gcgcctgctg gcgcttcttc gaggccggca tgtcggccaa gaggatgggc 240  
ctcgccgacg acgagcagat cgtcaagatg aggccctccc ttaccaccag aatgacctcc 300  
tcccctgcag atcaagatga tagtccgtag agagcaacga tgcatacata cataggatga 360  
agattgatgt tggaattacc anaattctta gtactacaca tacatacata gaa 413

<210> 5503  
<211> 403  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-022-Q1-E1-H6  
<400> 5503

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acaacggcgg aagcggcggt gcagagtgc aactaggcgg cttctggctc ctacggcgcc 120  
tacgggagct cacgaggtta ctggacatgg attccaggcc agtaagtcac gggagtgcg 180  
ccggccatga gcttgagcgg cggtgggttt cggcctcgat ggaactacgg cctagagctc 240  
gcaatcgaga gcgttgtag aggggaaatg accagggtgt cacaacgcgt tggatggng 300  
gctcggngac tcgggcgagg ctctggagtc ggtgtgtggt cgccggcgat ctcgccggac 360  
gagagttgaa gacggcgaag gcgacggcga tgcaaggcgt tcg 403

<210> 5504  
<211> 457  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-023-Q1-E1-A5  
<400> 5504

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atgtttcaaa aaatgttcgg gaatttcaaa aaatgttctc gttttcaggt agaaacacaa 120  
tttcagaaca atgttgatgt ttgaaaaatg ttcgcgggtt caacattgtg atcgcaattt 180



caaaaaatat ccctgtgttt ttttgttcgc atttccaaaa cacatatgaa tacaaatatt 240  
 gttcgcattt taaaaaaaaat attcatgttt tatttctttt gggtttgaat taagaaaatg 300  
 tgtttttcaa ttttgttta aaaatatcat ttgtggtctt agaaaatatt taggaatttc 360  
 caaaaaagga aatagaacat cacatttttc gaaaactggt tgtaatatat acaatacttg 420  
 cgtgatttca aaactgtttg caactttaaa ggaatgt 457

<210> 5505  
 <211> 483  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-A8

<400> 5505

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 ctttcccctt agttgctcga cactactggg ttactatcga gtgccgaggg tgagacctct 120  
 tcagcacttc taatgttaac gttgtagtgt agctattcgg tcgtggtcat cgaggggtgat 180  
 ttctctctta accacttccc aagtctcaga aaggtaacga tgctatcttt gtcgtcatcg 240  
 accaattctc gaagggttgct cactttctgc cagtcaagga gactatcact gctagtcaat 300  
 tagcaaactt gtatatctcc agaattgtgt cactccacgg cattccgaag gagatcagtt 360  
 cagaccgtgg aagtattttc actccgaagt tctgggatag tttccaagag gcaatgggaa 420  
 ctcatattac ctggagcact gcttatcatc cccaatcnca agcccaagtt gagcgagtca 480  
 atc 483

<210> 5506  
 <211> 262  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-C2

<400> 5506

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 ttgtgggatt tgctttgtaa tggtaatcgt gaaattggtg tggttgaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

agcggccgct caaaaggatc aaagctaacg tacgcgtgaa tgcaacgtca tagctttca 240  
aaagtgtcac ctaaattaaa tt 262

<210> 5507  
<211> 138  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-G7

<400> 5507

aactaggcgt gcatgctagc tcagaccgct gcgaaagtgt caccgtaatt caaatcactg 60  
gccgtacgtt tctacagcgt tcagactgac agaaccttgt cataacgtaa catatccgtc 120  
ttggattata tctaccga 138

<210> 5508  
<211> 306  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-H5

<400> 5508

ggtccacggg ggaagaggaa ggaaggacat ggagttattc gtgacgtggt taaaactctt 60  
gagggtttttt ttttgaaaaa aagcaaatac actgccccgt ggacaacttt tctcggacag 120  
agggagtatt atagaagaaa atgttggtatt gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacggtca aacaaaagga 240  
tccaacctta cgtacgcatg aaagctacta catagcccat caagacagtc atcataaatt 300  
caattc 306

<210> 5509  
<211> 461  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-A9

<400> 5509

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 gtgcgccacc gatgtagcct cccagttgga gttgttgtct gatgacagtg gtgtggctga 180  
 gcgaccacga tggaccagcg ccattggtga ttatgggaga agcagacgag ataagctaca 240  
 gggagggagg ggaaaatgcg acgcaggact cgcgagccgt gagggtttat atagtaggcc 300  
 tgtaagtatt ggatttttgg tgatttcacc gagtcgggtg ggaagctcgc gcaggaacct 360  
 gcgaggttac gcaggaatg agctcactga cgattcattg gcaccaccgt tttggcaaaa 420  
 gaacgcccc gcgcgttgca caagcttgcg ttgtacgcct a 461

<210> 5510  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-C12  
 <400> 5510

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 gatccatcta gtagcttttc cttcggatt tgtttagtta aaagttagcc attgcaactt 120  
 cgtgtacttc gtttgtgtcc aacgaccaga ccaagaccgc ttacggatcc ccacctttat 180  
 caataacttca tacatattca caatattcag attgctttta tcatattctt gcttgttctt 240  
 tgattgcttg caggaataga cttcgtggt cagggttgatc gtgctccggc gtggtcaata 300  
 acctcaagag attggtttag cgattgctaa ggcgcgacgt cctcgcacgt tcatagtcgg 360  
 atcgtgaaag tcgtctccag caaatcgata gttatcatct catcgaaaga tcgggacacc 420  
 tcccgcccct atc 433

<210> 5511  
 <211> 206  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-E10  
 <400> 5511

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cgctgcct gcagcaacaa tcagtaatca tgcataaata aataatggc acaataccaa 120  
 aggggcccgc ctaaaggatc aaagcttaat ttcacatgca tgcaacttca aaacccttca 180  
 aaagtgtccc ctaatttcaa ttcagg 206

<210> 5512  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-024-Q1-E1-E6  
 <400> 5512

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 catagccatt ccgagatata ttgccatgca actttccacc gttccgttta ttatgacaca 120  
 ctccatcatt gtcataattgc ttagcatgat catgtagtcg acatcgtatt tgtggcaaag 180  
 ccaccattca taattctttc atacatgtca ctcatgagtc attgcatatc ccggtacacc 240  
 gccgaaggca ttcatataga gtcataattt gttctaagta tcgagttgta attggttgagt 300  
 tgtaagaaaa ataaaagtgt gatgatcatc attattagag cattgtccca gtgaggaaag 360  
 gatgatggag actatgattc cccacaagt cgggacgaga ctccagaaaa aaaangcggn 420  
 naaaaaaaaa aaaaagcggc cgctctagag gattcaagct t 461

<210> 5513  
 <211> 142  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-F3  
 <400> 5513

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 cgggcgctcc aaaagattca aacctaactt cgccttcaag ccaactcaaa acccctccaa 120  
 aatggcaacc aaattcaaat ca 142

<210> 5514  
 <211> 236  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-F8

<400> 5514

cgaggagattc acaggagaga agcgacggag ttagaagttg taaatatgca ttgttgatc 60  
gcgacctgaa tgaaataaac gaaataatgc tcttggtcaa tcggcaaaaa aaaaaataa 120  
aaaaaaagaa aaaaaagagg acgcacaaga tgatgaaaac agatgatact actgcatgcg 180  
acatcatagc tcttccatat tatcaactaa atacacatca caggtcgtcg ttaaac 236

<210> 5515

<211> 136

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H4

<400> 5515

tgacacataa acaaaatgga tacggaaaaa actcatcaaa aatgtcaaaa aaaaatcggc 60  
cccccaaaag gatcaaact aacttaccct tgaatgcaac ttcaaagccc tccaaaattg 120  
tcacaaaaat tcaatt 136

<210> 5516

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A10

<400> 5516

attcccgggt cgacgggtac agccactacg gtcgctcgac gacgaagtcg gcgaagagga 60  
gcggcgga gaagcagacg agcaagatcg tcggcttcgt gaagatgcac ttcgtcggca 120  
cctccttccc gccagctcga gcgaggatc ggttggaacg cagccgcgcg cctgctatt 180  
cgtcatacaa cgactacgag tacgcggcgc agtggaacgc tgtggttccg gcgacggcgc 240  
cgcccggtga ggaggaggtg gtggaggtgt gcgacgacac ggcggagtgc gggtagctgt 300  
gttggtgga ggaggagagg tcgtcgggtg gcgtgccggc gggcgaggac gacggcgccg 360  
aggctagtcc ggcgggtgaac gagatcgaca ggctggcgga gaagttcatc gcgaggttcc 420  
acgcgaagtt cttgctggag aagcaggagt cgtacc 456

<210> 5517  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A12

<400> 5517

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gtacagggtcc gaaattcccg ggtcgacggg gcaccctctc tctcctccat ttctctctc 60
ctcctgccac cgatcccgaa ccaggaggga acccggcgcg aggagggcaa aggaagagaa 120
gaggagatca ccgagcccag cgcgcgcaca ggacagcagg cgccgcgatc tcgcacagga 180
gcgagatgg ggctcacgtt cacgaagctg ttcagccggc tcttcgcaa gaaggagatg 240
aggatcctca tggtcggtct cgatgcggct ggtaagacca ccatcctcta caagctcaag 300
ctcggagaga tcgtcaccac catccccaca atcgggttta atgtcgaaac tgtagagtac 360
aagaacatta gtttcaccgt ttgggatgtc gggggtcagg acaagatcag gccctgtgg 420
aggcactact tccagaacat cc 442
```

<210> 5518  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-B4

<400> 5518

```
gggtccacct ccgcggacga agtcagcgc atgatggcag agatcgacac cgacggtgac 60
ggcttcacg acttcagcga gttcatctcc ttctgcaacg ccaaccggg gttcatgaag 120
gacgtcgcca aggtcttctg aatcagttca tttcacctca gccgtccgtt ccaggagccg 180
atccatctac gtacggcttc gtatatcaat ttcagcaac tacctactcc ggtcccgatc 240
cagcctcagc ttcacctgag gccggccta aatttgttg atcaattctt ttgctactag 300
tagtaactag tgatgatcac tgttgcatca tttaattatt tattttatat atcatcacia 360
gtttcctgtg attcctttct ttctatacct tttgtcgat tgcngctcc agctcgatcg 420
aacgattcat gctgctaatt gtttgtg 447
```

<210> 5519  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-B7  
  
 <400> 5519

```
gtacaagtcc agaattcncg ggtcgacggg ggtatttaga tatttgctgg gagaaagaag   60
agatagatca agagaacagc tcagcactgc ggaaaacaaa gtcaattata ctcacaaata  120
gttctgcatg caaactgaag ctgggagatg tggaggggtgc tttgttagat gcagactttg  180
cactgcgtga aacagagggc aacgcaaaag cttttttccg tcaaggacag gcacgcatga  240
cactcaagaa tattgatgct gcagttggga gcttccagcg tgcgttgagg ttggagccaa  300
acgatggagg aatcaaacgg gagctggctg ctgcaaagaa gaaggttact gacagacgca  360
atctggagcg gaaggcattt tccaagatgt tcgagacgct aggaagttca gagaaaagtg  420
atggagtatt ggcagcaagt tcagag                                     446
```

<210> 5520  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-C10  
  
 <400> 5520

```
tccagaattc ccgggtccac ggggacgacg acgtggatgt ggacgagtcg gatagaaagc   60
tcttagatga tgaaaagaaa cccgatatca cgaaacgacc acacactcct attggagatg  120
aggtggaatg caagaagcca aagatagcag aaggctcaag gtgccaagga gaagaacctg  180
aggctggagg gataaagaat tcctcctggg tctgatgaca ggggaatgca gtaaacacca  240
gaagcatcaa aactatgatc tggaacagta tcctgaataa actatcttct ggattatgaa  300
tgaattctga agcatggggc tataagttaa ttatgtaaca tggatttgta actatggtgg  360
atgttaagtt aacgttctat cagtgcacgc tgaatgcgtg cccaaaaaaa aaaaaaaac  420
atcaaaaaaa aaagcggccg ctctag                                     446
```

<210> 5521  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-C2

<400> 5521

```

gggtccgacat tcacgggtcc acgggatata tggaattgga gttgaggtcg gtggagcgtc   60
aggggggcccc tgatgcaggg gggctcgccc aggggggtan gcgcgcccc acccttgccg   120
acagggtgtg ggccccctaa cgtggatctt tcttcagta tttttttgta tattccaaaa   180
ataatctccg ttgattttca agtcattccg ggaactttta tttctgcaca aaaataacac   240
catggaaatt ctgctgaaaa cagcgtcagt ccaggtagt tccattcaaa tcatgcaagt   300
caaagtccaa aacaaggga aaagtgtttg gaaaagtaga tacgacggac acgcatcaat   360
tcccccaagc ttaaacctat gcctgtctc aagcaattca gttgataaac taaaagtgat   420
aaagaaaaac ttttacaac tcc                                           443
  
```

<210> 5522  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D10

<400> 5522

```

gggtcgacgg gggtcatatc gacaatcaac cgtgatggcg tccaaagtcc ttcttgcaat   60
cctcctctc gccgcggcga cgccagcgtc gctggctgcc atcgatatgg cgcagatgct   120
cgctgacaag cccagtagc cgaccttctt gaggtcctg aaggagacaa aggtcgccga   180
tgacgtgagc cggtcaagt cggcttccgt gctggctgct cccgagaagg ccgtaaagcc   240
actcttgccg gtgccggccg ccaagcagcg gacgatctc cagcatcatg tctcatcaa   300
gtatttcgac cccatccage tgggagagat gaagaccaac gttgccaaagc tccagaccat   360
gctctccaac acagataagg acatgggcac catcgactac tccaaggaca aggacggcca   420
gatgtaccta cgctccccag gcgccgatag tg                                           452
  
```

<210> 5523



<211> 464  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D11

<400> 5523

tccagaattc ccgggtcgac ggggtcttggg gatgctatgt ttaatgaaga tgatattttt 60  
 agcctcccaa gttttgatat gcaaagttgt tatgatgata gcatgcctct tacttatgat 120  
 tatattgatg aaagtgggtc tggaagagtg tcaactttag gaagtgatga ttccactatc 180  
 ttgggagagg tctcaatcga ttatgatgag aacaaagttg gtacttatga tgattattgt 240  
 gatgaaactt atgctataaa aaatagtgac gattatattt ataaaacttg tcatgattat 300  
 gattaccctt tttcttaacg ttactctttt aatgtggaaa caaatttttag tgttcaagtc 360  
 tcttatgata ctcccgctgt tccgaatgag aagaattttg cttatgtgga gagtagtaaa 420  
 ttttctatgc ttgtagatta tgaaaagaat gcttttagtg ctgg 464

<210> 5524  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D12

<400> 5524

tccagaattc ccgggtcgac ggggaagcgg tcgttcgatg ccgagacgcc gcggcggcgg 60  
 gagtcggcac gcagcaacga ggcggtcgag gaggcgcgga tcaagctgct ggagctgcgg 120  
 caggtgaaca aggtgaaggc gctcgtcggc gccttcgaga ccgtcatgga cgacaaccaa 180  
 agccccaccg ccgcccga ggcggggtc aacctcggcg cctgaactac gactacattc 240  
 gatgagcatg aagctcgatc gcgtgcgcct cctcctttat ccccgctact ctttaatcac 300  
 ccatcaaccc aatttgctgt cgtcgcacac ttatctataa ttacgggtatc gcttatattc 360  
 tgcaaggagg aagatgatgg aggggttatc atcatgatgt aataataata atgatcatgg 420  
 aggaagatgg tgtattttac tttatactat cgtctacacg atcaat 466

<210> 5525  
 <211> 458  
 <212> DNA



<223> Clone ID: LIB104-025-Q1-E1-D9

<400> 5527

attcccggtt ccacgggttc tccacatttg tacagtgagg cagggtccgc ttctagccag 60  
cattatgcta cattgtactg cctgtaactt gtaatggagt ctggagcgat tcagtgtgtc 120  
tgtcagttgc ggtgcggcgc atccgcccga cggccatgat tggcgtgtca gtctttcgac 180  
acagtacgtt attcgcatat gtgtgtgtgt gtgtgtgtgt gtgtgtattg ctgtgaaaaa 240  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagaaa aaaaaaaaaa 300  
aaaaaaaaa aaaaaaagcg gccgcccaga aggatccaag cttacttacc cttgcatgca 360  
acttcatagc ccttcaaaaag tgtccccaaa tttcatttca ggggcccgtct ttt 413

<210> 5528

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-025-Q1-E1-F12

<400> 5528

tccaaaattc cggggtcgac ggggacggag atcgggttcg tccacacact cccgccgcca 60  
ccaccgccgc gaaccggaga gcgaggccga caccgccgcc gcgatgaggg ccaagtggaa 120  
gaagaagagg atgaggaggc tcaagaggaa gcgccgaaag atgaggcagc gatccaagta 180  
ggccgtaagc atcatcttgc atccaggcag cggaactctg aggggtgatg gcattgtcta 240  
gtgattcttg atttgttctg ttgttttggc tgcggaagtt gcttttacct gtgtttggtc 300  
aaatttagtt gtttaatact agtctggcta tgttccagta ctgagtttta tgtaatgtga 360  
ggattatatg tgtttgtgac tgaattttat gcacctatta tccttgagga aaaaaannnn 420  
aanaaaaaa aaaaaaaaag cggccgctct 450

<210> 5529

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-025-Q1-E1-F9

<400> 5529

taccagtcca aaattcccgg gtccacctca ggtatataat cgtaatggta ggctgcacc 60  
accacctcag gtacgagatg atgtccatat tctaaactg aaattgaata ttccaccatt 120  
tgagggtaga tatgttcttg atatatatct tacttgggag ttagaaactg aacaacgatt 180  
tacatgttta caatattctg aggagagacg agttgctgct gctgtttgtg ctttcaactag 240  
ttttgcatgt gtatgggtgt ctgaacattg tagattatat cctattccaa ctacttgggc 300  
tgctttgaaa agtgctatgc gtacgogttg ggttccacca tattaccaac gtgaattgct 360  
tcaaaaattg cagcggttaa gacaaggga aaattctgta naagaatatt atcaggaaag 420  
tgaaacttgg atgattagat gtggtattgt 450

<210> 5530

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-G10

<400> 5530

attccccggg ccacggggta atgctcaaac acatatccat taacgatgtg tgggtcaatg 60  
aaccacaat catggatgtt cttactctg cattccttaa tcttcattct gcatgtataa 120  
tagcggacac aacaatatag ttaggacata tatatagtgc aggcaatatg aacgagatgg 180  
ggtagaaata aatcacttac agaacgtagc aactgatgat agatttgtcg agctcgcgca 240  
gattgaaaag ctggaacaat tcaactcagat gaatttgtac atagtaatct ttgaagtgat 300  
gctcatatct aacttcaca taaatatatt ctttggcggt tttatttttt atgtaaccct 360  
tgtaccattt cagcagacct ttcatttatg gaggtagatc ctgttctctg gcaggctcga 420  
cgagaggccc attcttcaca tatgtaatta ctacctct 459

<210> 5531

<211> 290

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-H11

<400> 5531

cggggtcagt tcagtcttct acagaatata gtctcatca tagatcccga ggactccaca 60  
aagtactatc cccgctttaa cctggaagat acttcaagtt ataaggactt ggtcgaacag 120  
atcatcaaat ttccttatct tattagagaa ggctatttc ttcttttagtg tcggtgatct 180  
tcgattcact ggccgtcgaa taactcgatc ttactattg aaaccttctt gtttcctatc 240  
ttactttcgt tgatgtatat cctactttcg ccacctggat tgatctccat 290

<210> 5532  
<211> 473  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-C5  
<400> 5532

attcccgggt ccacgggagg cggataacgc tcggagggtg ataattattca tgatgcgtca 60  
agttgctcag cgacaccgaa cacaaggct ccagagtcca agtggcatgc ctggagatgc 120  
cgaggaaggt tatgcggtta gcagcgggtg cgccaatgga accaccccggt accctttcac 180  
cttggagggc gacgacgagg atgacatggc tctggccgga ggggaagggg cgggtatgct 240  
tagatcagac aggcgtcgcc ggcgacgcg taggaaccgt ggaagactgt ttttagattc 300  
taattgagaa ggcaggggct ctgtcaccag agtacatgca cagctgattc cctgggtgcct 360  
ggcattcatc aattccaacc aaaatttact tgttcatgat cattgtacca aagtagtttg 420  
tcttaacctc agtcatcat tgctttccat caacctggtt tcattttcac att 473

<210> 5533  
<211> 475  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-026-Q1-E1-D8  
<400> 5533

attcncgggt ccacggggcg tatgaaaaag gtagacatca aaacataaat ttgaaaatat 60  
gttaatcatg catttataaa acggtaaaca tgtactgtat aaaacaatgt ttctcatgta 120  
aacaaaaaat atagaggggtg tatgtaaaaa agtccacata aaaattacta caaatgtta 180

atcatgtatt aaaaaaatgt taattgtgtg ttttaaaaaa tgctcctgat atatatggaa 240  
aatttacaat gtgtataaaa aagttgacat caaaatatat atttgggaaa caaagtgtaa 300  
tcatgtgttt gaaaattttc aaatgtatgt gaaaattgtt gctgtatacc aaaaaattaa 360  
tgtgtacgaa aaagaaaata tgcatacaaga cttatatatta aaaaaaatgt tgatcatgta 420  
tttaaaaatt gttaaacatg tattaataaaa tatacccgat atatacgaaa aatat 475

<210> 5534  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-E1  
<400> 5534

cggtccgaaa ttcacgggtc gacgggaagc ttttatggac aaaggaataa aggggtggcaa 60  
gagcctaagc ttgggggatgc ccaaggcacc ccaagatatt caataatagc caaaagccta 120  
agcttgggga tgccccggga aggcatactc tctttcgtct tcgttcattg gtaactttac 180  
ttggagctat atttttattc gccacatgat atgtgttttg cttggagcgt cgtgtattat 240  
attagtcttt gcttttttagt ttgcaacaat catccttgct gtacacacat tttgggagaa 300  
gcctttttga ttagaatttg ctagaatact ctatgtgctt cacttatatc ttttgagctt 360  
gatagttttg ctctagtgtc tcacttatat ctttttagagc acagtgggtat cttaaatttg 420  
aataaattgc tagtctctca tgc 443

<210> 5535  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-E8  
<400> 5535

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ttgatgaatc tatggctagt aaaatagttt ataatccata gagaagttgg aatacagtag 120  
ttttaacacc aatataaatt aagaatgagt tcattacagt accttgaagt ggtcttttgt 180  
tttctttcgc taacggagct cactgagttt ctattttgag ttttgtgttg tgaagttttc 240

aagttttggg tgaattcttt tgatggatca tggaacaagg agtggaaaga gcctaagctt 300  
 ggggattccc atggaacccc caagataatc caaggacacc aaaaattcaa agcttgggga 360  
 tgccctggaa ggcattccct cttttgtcca cttccatcgg taatttactt ggagctatat 420  
 ttttattcac caacatgat 439

<210> 5536  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-F1  
 <400> 5536

tgacgggtccg aaattcacgg gtccacgggg aagaaaggga agaaacgccg gaggaggtct 60  
 aaaggaacta gccaggcaac ggctgaaggt gcttctggag agaagaaaaa gaggaagagt 120  
 cggaacaaaa aagttgaggc tgaaaatgag aatgatgatg aagatgatgc tggtcctgct 180  
 ggttctgagg actcatcaat gggagaaagt gatgaggact ctgaagtga aagagagacc 240  
 aagagtgatg aagagcctga agcaacaccg gtgaagaaaa agtcaacaga tggtaaacaa 300  
 ggaaagaagg aagctggatt caaggcaaag gaaaaggatg catcggtgaa gaagactcct 360  
 actaaatctg taaaaagcgt gtcaaagcca aatg 394

<210> 5537  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-F11  
 <400> 5537

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 gcttggaggt cgagcttggg gaggagaaag cttaagtagt gtggctcggg cattccatcg 120  
 aacacctcat gtgcatanga ggtgagctag agcaccacaa agctctcccc tcgccggcca 180  
 cganaaatag agcactgtga gtgctctgct cgcgggcgag gggtagatat aggcaactaa 240  
 ttggteccgg ttcgtgccac gaaccgggac taaagggcag cctttgggtcc cggttcacgc 300  
 caccaactgg gaccaatggt ggtggggccag gagcgagacg cattgggtccc ggttcgtcnc 360

accaaccgga accaataggt ccagccgaac cggaacaat ggcccacgtg gcccagtcng 420  
 ccccggggt cacgaaccgg gttcaatgcc ccc 453

<210> 5538  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-F2  
 <400> 5538

cggtccgaaa ttcacgggtc cacgggggtg aaggcaagcg ccgggactag gcaccccggt 60  
 tctcatcgcc gctatgggtt catgacgaag acaattttat cttaagttag aaccgcagca 120  
 acaattgatg taatataact ctgcagtact ttaagatgaa acatgctatc ttctgtgtt 180  
 gatctttctt tgtatgtata caccctacgc ccagtgggat aggggttgccg ggcgcgtaaac 240  
 ccatgctatg gcgcttcgag gacggatcct tagcagcctg ccggggggcgc ttgctgccgg 300  
 aaaaaccaac ttgccactct tagcggggcc gcttgagctg ttgagcggac tcaaaataga 360  
 acaaggacgt tgctaata 377

<210> 5539  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-F6  
 <400> 5539

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 taccgctgag gcaacccgtg aggagaatgt gtacatggcc aagctcgccg agcaggctga 120  
 gcgttatgag gaaatgggtc aattcatgga gaaggtggcc aagaccgctg atgtaggtga 180  
 gctcactgtt gaggagcgca acctgctctc tgtggcttac aagaatgtga ttggtgccc 240  
 gagggttcc tggaggatca tctctccat tgagcagaag gaggagagcc gtgggaacga 300  
 ggcctatgtc gcatcaatca aggagtaccg taccaggatt gaaaccgagc tcagcaagat 360  
 ctgtgatggc atcctcaagc ttctggactc ccacctgtgc ncctctgcca ctgcagcaga 420



gtccaagggtg ttctatctga aaatgaaggg tgactacca

459

<210> 5540

<211> 184

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-G12

<400> 5540

aagccaagta aattaacaaa aacaaaaaaaa agtagttaaa ttggggacgt caaaaatggt 60  
tcggatttaa ataaacctta aatgaaaaaa aaaaggggcy gctcaagggg ttcaaagttt 120  
aatttcgctt gaatgcgatt taaaacctct tcaaaagggt aacctaggtt aatttcaagg 180  
gcat 184

<210> 5541

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-H3

<400> 5541

gggccgaaat taccgggtcc acggcgcaga ggtgtaagaa acagaagggg tgctctgttt 60  
ctcacatcga gtgctctgtc gagcagaact actgatcgtg atcgccccga gcacgggcgg 120  
ggatatatt gaccatcgag tgtcatgttg ttctcgctgtg ctgggggtttt gttgtcgggg 180  
ttttgtcgtc agatttcacc agctcgtttc tttctcgggt tctttgtttc tttcacacgg 240  
taaatgcagc taccactcga ttcttggcgt ttgttggttg taaagaagat cgtagcttgt 300  
aagtaaaatc gtttgcagtg taaaatgtac aaaggtagca tgggaaatgc ttaacagagg 360  
agtcttggtc ttgcactcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagc gggcgct 417

<210> 5542

<211> 53

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-A12

<400> 5542

agtcgtatta aaatctgcgn ctcgtgtgtg tgttctttct gtggtgcggt gag 53

<210> 5543  
<211> 393  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-A4  
  
<400> 5543

gggtcgacgg ggaccacaag gagaagaagg acaagaagaa gaagaaggac aagaagcacg 60  
gcgagggcca caaggacgac gacggccacg gcagcagcag cagcgacagc gacagcgact 120  
gagccagctc cggccgcgct ccggcagcag cgtgcagtgt aggcgagatc gatgaacgct 180  
tgggagaagt gtggcataca tatatgttgc agggtttggg gctgtgtgta gcatatgtat 240  
gtaatgcgtg acatgtctca tggatcttgt gatgtataat aattagccgg ctgcactgca 300  
ctgcacggtg cttgtaataa taacgttaat gaatcatgtt ggcattgatg tgaaaaaaaa 360  
aaaanaaaaa aaaaaaaaaa aagcggccgc tct 393

<210> 5544  
<211> 371  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-A7  
  
<400> 5544

cgggccgacg gggatcttga gcaaataca caccaaagtt tgatgatgac aaaaggctat 60  
gaggagatgt ctattgcgta ggtgcaaaat ctccatcgat acagatcgcg ctaggtgcca 120  
gtttttccgc agagaacggg ccccgctggt aatgtgctgc aagattgatt gacagatctt 180  
aagcaggctc tcgcaagtcc tcacgccggt gatgatcagt ttgtcagcca gatacataag 240  
gatcgtaata gaaacggggg caatgcctaa caaccagtaa cgtagattgt caagagacgg 300  
cgacacagct catcatcatt ctcttgata ctctgcacag gctagtccac ttttccacag 360  
aagactcaat g 371

<210> 5545

<211> 468  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A8

<400> 5545

gtaccggact agaattcccg ggtcgacggg atgatgatag ttgatttgat tctgctgaaa 60  
 aacagaaact ttgtgctgac gaatttagtt ttgttaaatac acagaacttt ttcattgatt 120  
 cgtttttctt ctgatcaata gacaaatctt acaggacttc ctattttggt aggattttta 180  
 gagttccaga agtttgctt agttatagat ttctacagat tgttctgttt ttgacagatt 240  
 ctgtttttcg tgtgttggtt gcttatcttg atgcatctat ggctagtaaa atagttaa 300  
 aaccatacag aagttgggat acagttggtt taacacccaa ataaataaag aatgagttca 360  
 ttacagtacc atatgtggtg gttttgtttt ctttcaacta cggagcttat aagatttcct 420  
 attgagtttt gtgttggtgaa gttttcaagg ttttggttaa agctttta 468

<210> 5546  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A9

<400> 5546

gggccgacgg gtacggcggt tcgataacta atagattttt gcaataagta tgtgagttct 60  
 ttatgactaa tgttgagtcc atggattata cgcactctca cccttcacc attgctagcc 120  
 attctaatac cgcacacctt tcgccggtat catacaccca ccatatacct tctcaaaac 180  
 agccaccata cctacttata atggcatttc catagccatt ccgagatata ttgccatgca 240  
 actttccacc gttccgttta ttatgacacg cttcatcatt gtcattattgc tttgcatgat 300  
 catgtagttg acattgtatt tgtggcaaag ccaccgttca taattctttc atacatgtca 360  
 ctcttgattc attgcacata ccgggtacac g 391

<210> 5547  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-B7

<400> 5547

aattcccggg tcgacgggga ggaggaggcc acgtcgggag ctgagggggcc ttcagctcat 60  
gttagttctt tgctcgagtg acagattgtt ttgttttgtt ttgttttctt tgctcgtgtt 120  
gaaatacagg tgttgatgat cgtgacaact gtttttcttc atttaggggc aaatgtatgt 180  
gtggctgcag tccccctcta tattgacatg cgatctattg tatttatttg ggtangagg 240  
gtatttaagg atcactttgc cctcaaaaaa aaaaaataaa aaaataaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaataaaaa ccaaaacaaa aaaaaaaaaa aaaaaaaaaa 360  
aaggggccgc caaaagggtt caaaccttac ttacccttga atgcaa 406

<210> 5548  
<211> 450  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-B8

<400> 5548

gtaccggact ggaattcccc ggtcgacggg gaaaatgctc aaatgcatga gatgaacacg 60  
tatgcaaatg cacatcacat gacgacatga taagagatgc atggtcacga caacagcaca 120  
cggtgacaaa gagccgaacc cgggaaaata gattaactta acgccgaaa cggcaatagt 180  
tggcgtacat atacggaacg ttacatccgg ggtgttacac ggtgtcccaa cttagcccat 240  
cacaagatct cacggtcatt gaaggatatt ccttctctca agacatccga taagccggat 300  
ccggtaacag acatctcaat ataggaaaca tgtcagcata gccagccgaa tgtgccgaca 360  
tatcccgata tgagctgcac atatctcggt ctacaggcac actcagactg tccaaacctc 420  
cggtaaggca tcccanaatt gcccttggtg 450

<210> 5549  
<211> 408  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-C2

<400> 5549

cggtccagaa ttncgggtc gacgggtatg agaaatatca tggatactac ggaggggaagg 60  
aggaatcgag gaaatccaac tacaccgatg tggttaataa atattatgat cttgctacta 120  
gcttctatga gtatggctgg ggtgaatcct tccactttgc tcacaggtgg aatggggaat 180  
ctttaagggg aagcatcaaa aggcacgagc actttctggc tttacagctt gagttgaaac 240  
cagggatgaa ggttttggat gtcggctgtg gaataggcgg gccattaaga gaaatttgca 300  
gatttaacct caacctcagt tactggattg aacaacaacg actaacagat aactagggga 360  
aaagcgctta atcggtcggg angacttggc gctacttgtg attttgtc 408

<210> 5550

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-C3

<400> 5550

ggtccagaat tcccgggtcg acgggccctt ttgggtgtta atcacatagc aatgtgaact 60  
agattattga ctctagtaaa ccctttgggt gttgatcaca taatgatgtg aactatgggt 120  
attaatcaca tgcagatgtg gggattgtgt ttaaatacaca tagcgatgtg aactagatta 180  
ctgactctag tcaagtagag gcatactaata gacactatgt ttgtctatgt attcacacat 240  
gtattatgtt tccggttaat acaattctag catgaatact aaacatttat catgatagaa 300  
ggaaacaact aataacttta ttattgcctc tacggcatcg atccttcaat ctc 353

<210> 5551

<211> 201

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-C5

<400> 5551

aattccccggg tcgacggggg aatcaacaca aaacaaaaac gaaaaaataa gataaagaag 60  
aagagtcaaaa aatgcataaa aatacctata catacaaaac aaaaaatcaa aaaaaattcg 120  
gccgccccag aggttccaac cttaattacg cttgaatgac atctcttgac gcttcaaaat 180

tttcaccaaaa tttcaattca a

201

<210> 5552  
<211> 469  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-C6  
  
<400> 5552

aggtaccgat ctggaattcc cgggtcgacg ggggatcaaa tatgataatc tatcttagtt 60  
gcccctggca gaacacaatg ttactgtcag gtcgccatcg gttatatcga gtgagtgttt 120  
gtggctggcc gagctggtct gagaactgct gaatgcaatc tatecttaaa tttggtaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaata 240  
aaaaaaatga aaataactaa ccataataaa ggaaaaaaaa aaaccggcaa aaaacaaaaa 300  
aaggggcccc ccaaaggtt caaagctaag ttacccttca atgaaagttc aaacctcttc 360  
aaaggtgccc ccaaatttca tttcaggggc cttcttttaa aaacttggtg acggaaaaaa 420  
ccctgggttt acccaaatta aacccttta aaaaaaaccc cctttttcca 469

<210> 5553  
<211> 456  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-C7  
  
<400> 5553

aattcccggg tcgacatcgt ctatcacaac tggctgctca tgtacctcaa cgacgaggag 60  
gttgagaagc tgattggcag gatagtgaag cggctgaagc ccggtgggca tattttcatc 120  
agggaatcgt gcgccacca gtctggggat tccaagagga aagtgaaccc gacgcactac 180  
cgggagccga ggttctacac caaggggttt aagggaaggc actcctaaga ccaagaaggg 240  
aattcctttg agctttctct ggtaacttcc aagtgcattg gagcttatgt gaaaagcaag 300  
aagaaccaga accagatatg ttggctgtgg gagaagggtca agtgacaga agacaaaggc 360  
tttcagagat tcttgacaa tgtgcagtac aaatccactg gaatcttgcg ttatgagccc 420  
gtgttttggg aagggttatg ttagcaccgg tggatt 456

<210> 5554  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-D2  
  
 <400> 5554

ggtccagaat tcccgggtcg acgggtatga atgtttagtt gctcaacgtg ttttgagtgt 60  
 gcaagttaca caagctgagc aaaatcagag gcataatttg tttcatacga agggagttgt 120  
 gaaggaacgt tctgttcacg tcatcataga tggagggagc tacaacaact tggctagcat 180  
 ggagatgggtt gagaagctat ctctcaccac aagacctcat ccacatcctt actacatcca 240  
 atggttcaac gacaacggca aggttaaggt aacatgtatt gttcgtgtgc attttagtat 300  
 ctctacataa tgctgattat gttgattgtg atgtgggtacc tatgcangca tgttccttaa 360  
 tacttggtag aacatggcaa tttgataaaa attctgtaca ccatggtaga atcaatcagt 420  
 atactcctgt tcataaggac aaaaatatta ctttgcttcc tatgac 466

<210> 5555  
 <211> 472  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-D5  
  
 <400> 5555

taccgatcta gaattcccgg gtcgacgggg gccgtgatcg ttatgccagt gaccggtacc 60  
 cctctggtgg tgaccgcttt ggtgcagaca ggtatggtgc agctccagac cgttatgcac 120  
 caagtgggtgg tggaggtggc tatggcaggg agcgggagag aagctacgag agagatggaa 180  
 ttcgtggtgg tggcgcttat gacaggagtg gccaagggg cgggtgcaagc tatgacaggg 240  
 acggcccaag gggcggcatc ggtggtggct atgacagggg cgggtccacgt ggaggcggcg 300  
 ccgactatgg cagcggaggg cctgctcgct acgagggagg aggttacagg gagaggcctg 360  
 cgccgtatga ccgccccagg ggaggaggac gcttcgacga ccgctattag tgacctgttg 420  
 ctgcantcga gctatgtatt tgcgttttaa ctctttcaag tttggcatgg cc 472

<210> 5556  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-027-Q1-E1-D8  
  
 <400> 5556

cgccaggtac cgatcaggaa ttcccgggtc gacatagccc gcttgcgggg cagaatcaca 60  
 tcgtaacctt ataaccacga tgtacgatcg tgttggtaca caatacgtat gagaaacaaa 120  
 tcacaaggaa aaaaatgcta cccacagcag ccgatctctc cttcctcccc ccgtcgacgg 180  
 gaagctcgcc ggcggcgagg tggcacgggc gacggacgtc ggaggcgaaa ccgctcgacg 240  
 aaacagaagg agggagcagc gctgacgag gcgttgcggc ctggggcgta cggcggcgag 300  
 atcgatgctc tgtcgccggc ggcgggttgg ggacgggtggc gagatcgatg ctccagccgc 360  
 catcttgctg tttccctttc accgaggata tgcatttgcg aacgtgattt gacgattaca 420  
 acctccaac cctcccaggg ccggcccata aagacgga 458

<210> 5557  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-E11  
  
 <400> 5557

gggtcgacgg gtcttatacg atggacttag aggattctac cactgcttgc aaacttcac 60  
 aatggggtag tgctagtga cctcgcaaat ctgaatttag aaattttctt gctagtataa 120  
 ctgtggggga atctagagat atagcagaag ctaccatagg gagcattcat tttcctgcta 180  
 tacattatth tgctctcttc ataggttagt gcataaatgg taaagatgaa gcatgtcaca 240  
 tgtgtgtccc tgaccttcag tattcttagg agtgctgtgt taggagacaa atcttataat 300  
 ttgggagcca ttgttgacg taggttgc ataatagtt ttaatggaga tttctttgca 360  
 ngaatttatg caaccgctt agctaatttc ctggtgtgga catacgtgat gatgat 416

<210> 5558



<211> 410  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-027-Q1-E1-E12  
  
 <400> 5558  
  
 cggtcaagta ttcccgggtc gacgggtggc aatgccaacg atatgttgat cttcaatgat 60  
 tttatccgca cccagtcgct agttgaacta cccatcaagg gtaggacgta cacgtggagt 120  
 aacatgcagg atgacccttt gctgggtgcaa ttagattggt ttttttcttc agtgactgg 180  
 tcttcttctt accctaatac cactgtatcg cccttgggca agcctgcttc agatcacgtc 240  
 ccctgcgtca ttggcattga tttgtgcac ccaaaaagca aggtgtttca ttttgaaaac 300  
 tactggatac aacattcagg gtttcacgag atagtgaat gctcttgaag ccaaccttgt 360  
 catgcggtca actcagcggc tttgatctgt agaaagctaa agaagctgcg 410

<210> 5559  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-E2  
  
 <400> 5559  
  
 ccggtcaaga attcccgggt cgacgggggc ggataccaaa accatcacac tatataataa 60  
 caagcaataa taaaagtaag aaaattagac aagtatctat ctaaagtaag aatttttctt 120  
 tcaggagaag attagaacaa gaggtcatc acggtgggtgc aagcgacgag attcgcgccg 180  
 gcgatcgacg gccgtgaaga cggggacngg acgtgacaga ccgctaaacc tagacaaatc 240  
 tcaaggaaaa tggagcttgg aggtcgagct tcgagaggag aaagcttaac tagcatggct 300  
 cgggcatttc attgaacacc tcatgtgcat aggaggtgag ctagagcacc caaatgccct 360  
 ctctcgccg gccagaaaaa atagagcact gtggagtgtc ctgc 404

<210> 5560  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-E6

<400> 5560

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acgtacacag aaagtgaata tagaagtgtt caagactgtg aagcgggagg ttcctggtat 120  
atctacgttt cattgtactt agttaagttg atgttactgt tgttttttct cgctgccgcc 180  
atgccatgaa caggcgaggc aggcagcttc tcaaacttgt gttgttgtaa cttgtatgat 240  
gggagcttaa gtacattact ttgtttcata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
aaaaanaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggccccccaa 410

<210> 5561

<211> 428

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-E9

<400> 5561

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gccttagcaa tcgctaaacc aactccgaga ggttattgac cacgctggag cacgatcaac 120  
ctgaccacga ggggtctgttt cctgcgagca aacgaagaac aagcaagaaa ctaagattgc 180  
aatctggata ttgcgaatat aagatgaaag ctttattgat caaggtgggg ttctgtgacg 240  
cctttgtctg gtcgttgaac acaaacgaag tacgcgaagt tgcagctatg gcgaactttt 300  
aatctaaaca aaaccggaag tctaaacgat gccctaaggg ctctatatat ggaggaagag 360  
gggggaatth cgtggccctt ggtggagggg tccgaaatca ccctatctct tgttttccca 420  
cacatacg 428

<210> 5562

<211> 265

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-F1

<400> 5562

gccacggtca aagaatccgg gtcgacgggt tacaacaaaa cagttcttgg tgataacagc 60  
tctcttgtaa ataccaacaa gctactcacc ttactggtec aaacctacta gttgctctaa 120  
atgtttaaaa taactttaca attctgtttt gatacaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaagcggg cgctccaaaa gattcaagct taagtaagcg ttcaagcgac gtcaaaactc 240  
tcctatagtg taaccaaaat caatt 265

<210> 5563  
<211> 370  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-F10

<400> 5563

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gcactgatgg tgaaggtacc accagtgcc a tctccttgg cggacacctt cttggtctct 120  
gggtggagctg ccattgtctt cttacacttg ccggtggagc tcgatgggtgc gtccccgacg 180  
gtagcgcagc actccaaaga ggtgcgcttg ccggagtggg catccgaact cttgccggac 240  
ttggtcttct tcttcgccct gggagcttca acagcaagtg acttgcgatc tggtgcggtc 300  
gctgcttcnc ggtagatctt gtcggcgagc ataagagcat ccttcttgtc gccagggaca 360  
gagatgacac 370

<210> 5564  
<211> 329  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-F11

<400> 5564

gggtcgacgg ggccgtgat catgtctgac taactcccg tgcgttctgct ctccacatcc 60  
tacgttaggt actgaagccc gtagataact tttccgccca ggtttagaac gtcgctgcaa 120  
acactacgta tgaaaattga taaatgagat agctcctagt gatgtttctc gctgaactgc 180  
tgcgatgttg gacactttgt cagcgacaag gagttatctc ctacgcgacc catcgtggta 240

ttgtgtacat ttgcttaagg ttttgcttat cgttggtatc atctatggta tgcaattcat 300  
gggtcggcaa tcataactca tgcaggagc 329

<210> 5565  
<211> 468  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-F4  
  
<400> 5565

ggtcaagcat tcccgggtcg acgggccaga gatgggctga gacccggata tggtttaaag 60  
cctgtagttg taatcattgt tatggtagaa cttgtagtgt aagacaagta tagttgagag 120  
tccgagccgg acactcttat gagccggccg ggactctgag ggctgctggg cgtcagcctc 180  
cctatataaa gggacgaccc ggcagcgggt tagaggcgag aacaatctca tcgagagctg 240  
ggatagcaag tttagttccc tggatgatcg aaccctaagc aataccatct caactggatg 300  
caggctttta ccttcaccgt aaggggccga accagtataa accctcgtgt tccttgctc 360  
atttaacccc ttcaagcttt cctagttgca atgggtccac gactaagtcc tagctcgatg 420  
acaatcggcc gtgacatttc cagcagagtt ggcgccacc gtggggcc 468

<210> 5566  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-F6  
  
<400> 5566

aattcgcggg tcgacgggct ggtgaacgcg ccggggctcg tgattgacgt ggtgcgcgac 60  
gccaaggaga aggaggcgga gggggctgag ttccggctgg aggacgagat cgaccatgtc 120  
gccgacgtcg tcatccgccg gatccacaag cagctcaagc tgcacaagct cgagtcgttc 180  
acgaggttct gcgagatgat ggagaggagc gcttgatcca catccctaga agcagatccg 240  
cctccagtcc agtgaggtat tatgcataag tatgcaactg gccagctcc atcacacct 300  
aagccaggat tatgtctaac ttgatccgag acccatgcat gtgagtagaa ggaagagata 360  
catccaggca agaagatgct tatcttctgc taaggtttta gtggggaagc caatgggtcaa 420

caacttggga ctttactcat tacgta

446

<210> 5567

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-F9

<400> 5567

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tcattatgct gcggtgacatg ccatttctga agatcaggcg gcatcagcaa acaaggagct 180

ggcttaaaaa gctccggcct gagggttttg agtaaaccgt acagccccga cgagcacgcg 240

gcaagcggca tgggtactgag attatccaca cgcgaaacaa tgagcttgat tacctctgtg 300

gggagcgaat tccagccact cttttggcga acgctgcttg gttctgccat tggtactgct 360

tgggttttcgg a 371

<210> 5568

<211> 413

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-G1

<400> 5568

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ngcaaatttc gttgaatttt ggcattgggc aatgttattg acagaaaaag gtgtcaaaaa 120

agtttggggc caatgatgca aagataaatg acatttcctt ctcaaaaatc cacttanggc 180

agaatgagaa aaaggaatat ttgtgaatta tctttgatga tgccaaggaa ggtttttgac 240

atatctatgg aagatatgac ccaaacaaaa ttttgagaac tatttgggaa tttggggagt 300

gacggaaaat ataggttggt tcacaaacta atggcaaaaa tgatgattcc tttaatagaa 360

aaaggaatat tccaataaaa aaaatattgg gaatggccca agatgaaaat gac 413

<210> 5569

<211> 401

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-027-Q1-E1-G10  
  
 <400> 5569  
  
 ccggtctagt attccccgggt cgacgggtcg atacatcagg ggaggcaaatt tgagggggagg 60  
 catgatgggt cctaattgaga ggcacttttg tatctggaat ggagtcacgg ttcattgactc 120  
 tggtattgca atttttattc aagcagttgt tgaccaggagg agccactgtt tttttatgta 180  
 cggtgggttc aggcgggaat atctatgata gcccacagtt atttgtatgt gagaagcatg 240  
 gacagacata gagatgcagg tccgttgata tcaactgaggt ttgtctttta agcaaagtgg 300  
 aggcacgcat gtggcttttg tgctggccga accgtgcttc ttttttctt tagtcccat 360  
 gtagtatttg cacgataggg tcattctgtt tgcttctct c 401

<210> 5570  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-G11  
  
 <400> 5570  
  
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 caagcaatac aatagtaaga aaattagaca agtatctatc taaagtaaga attttttttc 120  
 tttcagaaag aagataagaa caagaggctc atcacggtgg tgccggcgac gagatcggcg 180  
 cgggcaatcg acggcggtga agacgggaat gggacgtgac gggccgctaa acctagacaa 240  
 atctcgagga aaatggagct ttgaggtcga gcttcgagag aagaaagctt aactactgtg 300  
 gctcgggcat ttcattgaac acctcatgtg catangaggt gagctagagc agcacaagc 360  
 cctcccctcg ccggccagag aaaaacagag cactggagtt gctctgct 408

<210> 5571  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-G3

<400> 5571

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gtcaagaatt ggagggcgag gcggaggaga gcgcagatcg agaggggaac ggcgacgaca 120  
ctgggaagga agatagtggg tgtaaagatc tggctctggg agaggaccct gtcctgggtcg 180  
aggatccaga ggaaggtacc tgtacttctc tggcggtcgc atccaagaac ttgttccgtc 240  
cattgttaag cacgcaagaa acttttctgt gctgttattt ggctctatta gctgactgtt 300  
ggtagtggtc aactgtaaga tgcaataata caatagaagt tctatggtgt tcttgcggtan 360  
gaatagttgc agaagaaaca gtatagctgg ttttcgggtg ttgctaattt taaatttaac 420  
aat 423

<210> 5572

<211> 111

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-G5

<400> 5572

gtaccggact agaattcgcc ggtcgacggg aggatttacg agtccggaac ctgcttcaag 60  
tcggccgcaa cgcgctatga ctccgcttca gtagacattt gtaggatccg c 111

<210> 5573

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-G9

<400> 5573

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tcaaggcagt gaactggaag aaactagagg ctgcacagat caagccaagc ttctgcccac 120  
atgttgctgg gcagacctgc attgcaaact ttgacgagt ctggacgagt atgcccgctgc 180  
tggattcccc cgtggccagc cctgtcgctg cagatagcaa cttcgtgggg ttcagttacg 240  
tgcgcccgga gccattcctt caaaagccga gtcctctagg ctgaagacta ctttataatt 300  
gtggtatcta agaaatctgg tatcttacct ttgtcaaga cagtaagatg aacctgctgt 360

tgtgcttgtt ttagacttca ctagttgatt gcccgtagt tgccatggaa cacaagaaca 420  
cacgtta 427

<210> 5574  
<211> 192  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-H1  
  
<400> 5574

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tctggaagta tctcatgcta tgggatcaac aaaaaatcc agggcccacg tgtggatcac 120  
aatccaccaa tgactgacca ggggttcttg cgcacccaaa tttgttgtga ccaactgggt 180  
gaactccctc cg 192

<210> 5575  
<211> 412  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-H11  
  
<400> 5575

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gcatcgagca tctctcttcc ctcacacgag tccatgccat gattagctgc aaatgtgctg 120  
tagcttcgga ggtgaatact gtgaaggatg cgatacgaga acaagcaggt aacttgtcta 180  
gcaaaccac gatcgaattt accacaataa atgaacacat gataattcct gatcacaag 240  
caaagacagc agcagtttcc cctaaaattt ggttaaacgg gtgtatcaac ttcagacaaa 300  
ctgcctagca tcgtaagagg tcaggatgga gtcaatttta atcacatgtg gctgaagcac 360  
tcatgcagaa caggacacgc gacttcgtct tctctctag tactccctcc gt 412

<210> 5576  
<211> 468  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-027-Q1-E1-H3



<400> 5576

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cgtattgtcg agatcctaac taagaaacag tcactatatg aataaatacc tctatcataa 180  
atgagtagat gtgtcatata gttgtagcaa ctgcaatfff ttctctaaaa aagaaaaggg 240  
attctagggt gtgaagcaaa actaaaggga tgtggataaa gggagggatg atagaaagaa 300  
ggaagaggaa ataaattaga ttttaggatt caacaaggta gggtcatgaa tttcatcata 360  
aaaaggaatg tgataaagca tcaatataat aaaaataata gagaattaaa aattttaact 420  
tgaaacaaga actacaaatt taaagcaata ataaagagcc gcccgggt 468

<210> 5577

<211> 309

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-H5

<400> 5577

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gaagaaggac aagaagcacg gcgagggcca caaggacgac gacggccacg gcagcagcag 120  
cagcgacagc gacagcgact gagccagctc cggccgcgtg cagtgcaggg gagatgaacg 180  
cgtgggttaa tttggagcgt gtggtagcat atgtatgtaa tgcttgacat gtctcatgga 240  
tcttgtaatg taataaccgg ctgcactgca tggtgcttgt aataataacg ttaaggaatt 300  
tccattggt 309

<210> 5578

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-H9

<400> 5578

ccggtccagt agttcccggg tcgacgggga ccacaaggag aagaaggaca agaagaagaa 60  
gaaggacaag aagcacggcg agggccacaa ggacgacgac ggccacggca gcagcagcag 120

cgacagcgac agcgactgag ccagctccgg ccgcgctccg gcagcagcgt gcagtgtagg 180  
cgagatcgat gaacgcttgg gagaagtgtg gcatacatat atgttgcagg gtttggagcg 240  
tgtggtagca tatgtatgta atgcgtgaca tgtctcatgg atcttgtgat gtataataat 300  
tagccggctg cactgcaactg cacgggtgctt gtaataataa cgттаатgaa tcatgttggt 360  
attgatac 368

<210> 5579  
<211> 422  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-B7

<400> 5579

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aattttcttcg ccgtccgtat cccaaccatg ctgaccgtaa tccggccagg gctctcctga 120  
caaagagaga gacttttagtg aattcaggat gtcgccaaaa ggcgagtgtc gaaagacgtc 180  
cgcgggcggtg aactccatga tcggagccca atcgggtttg atcggaaggg gtgcggagga 240  
ttcggaggtcc ggaacggagt ccggcacctt ggaatcacgg gccttgcaaa ggactaggct 300  
ggtatttggc tctatcgccg taaagattgc ggctcctggg gcagcgtcca atcgctccgtc 360  
cttggttggt gtagtcggct ccgggataat ggctggagcg gacacctgag ccgcgctctg 420  
gg 422

<210> 5580  
<211> 408  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-C1

<400> 5580

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ccttcacatc attagtgtg tccaccgtag cgaacatgta gtgggggcta ttgacaaacc 120  
tggcgaaacg ctgcgaatgc cttgtcgtca ggcagtagtg gtagacgagg acgtggtggc 180  
gcacacacat ctgagcgacg acgaccttgg gacgcgaccc ggcacgagcg cgagcgtact 240

caaggtcgaa cccgaccacc ttgtacttct ccgcggcaag caagagctcc atgatgtgga 300  
 tgtagtgctc caccacagaat gggtcggttg tgtacaccat caagaggtac atgaaccttc 360  
 tgggtgggtgt ccaccacggc acgcatgggtg aactgctgct cgtcgtca 408

<210> 5581  
 <211> 331  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-028-Q1-E1-C11  
 <400> 5581

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 agatctacta ggaagctttc tacttccggt cttctccgca atttttatgt aggcataact 120  
 ccttggaata gatgtgttct tgatactggt gccggagggtg atttcttgag tagccatacg 180  
 tttgacgctt ataatgctat gttagatttg tttggccac cacctctttt ggtaaatgga 240  
 actgttttaa ctttagaaca cgttatgcaa cggcttgatg ttatttaaaa taaaatggcc 300  
 agtggttgatt tgattgaaaa tttggataaa a 331

<210> 5582  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-028-Q1-E1-C12  
 <400> 5582

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 tgtttcgatg actaatagat ttttgcaata agtatgtgag ttatttatga ctaatgttga 120  
 gtccatggat tatatgcact ctcacccttg catcattgct agcctcttcg gtaccatgca 180  
 ttgccctttc tcacottgag agttgtgcaa acttcgccga tgcattcaaa cctgtgata 240  
 cgatacgctc tatcacacat aagcctcctt atatottcct caaaacagcc accataccta 300  
 cctattatgg catttccata gccattccga gatataattgc catgcaactt ccatcatcat 360  
 catatacatg acttgagcat ttattgtcat attgctttgc atgatcgtaa gatagctagc 420  
 atgataattt catggcttgt caattttttg 450

<210> 5583  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-D11  
  
 <400> 5583

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 acatcatcaa cgagcgcggg ttctatgcgc aaaggagggc ggagagggat aagatgaggg 120  
 cagagcgaac cgcctatcgc gaggacaagc gtaggcgaaa agtggacgct caattcaaca 180  
 tgaggctagg agcagcgctg ccttgggaat tggacgacga tcggtatctt ctgcctaca 240  
 gtcatacgtc agaggaggac atcacctagg aggagtcaga caacaaggag tagttgaatt 300  
 atcttttttt aaccaaccat gctgagaact atcctctact ctatctactt cttgagctca 360  
 gcactgtaaa cacttttttt aaagcgccgc gcattgtgat tctgttggag atgctctaac 420  
 atggcagatg agtgctttta tgttgccac aag 453

<210> 5584  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-D5  
  
 <400> 5584

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 tattgagtta tatagttttt gatctagtgc ttcacttata tatttttaggg cacggtgggtg 180  
 gatttgtttt atagaaacta ttcttctctc atgcttcaact tagattcttt tgagagtcct 240  
 aaaaaacagc gtggtaattt gctttaatta tgtaggcat tcaagattaa taaaaaatt 300  
 cttatgagtg tgttgaatac tatgagaagt tttatacttg ataattgttt tgagatatgg 360  
 agatggtgat attagagtca tgctagtga gtagttgtga atttgagaaa tacttgtggt 420  
 aaagtttg 428

<210> 5585  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-D6  
  
 <400> 5585

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cttccttctg ctaatgaatt gattagttct cagtcaaaca atgaggcaaa tggaaatctg  120
gaaaacacac aggaagtgca ggtgaaccca acgagcttat ctcaatacag ggacatccag  180
agaaagattg ttgagtttat cagaaagaga taccatattc tggaaaaatg cttggacatt  240
gaatatgccg tgataaaaac aaatactcct gttoctgatg atcttactga acaaaatggt  300
cctatgggac atagcccagc tgttccagat atcagtgaag tgttgagaga acttccccct  360
cttgtaccaa tttctgccaa agaagtggct tctgatggct caactgacca ggcacacctt  420
tcccatcttt                                     430
  
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<210> 5586  
 <211> 176  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-E11  
  
 <400> 5586

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atcgacgggg atccaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaa aaaaaaaaaa   60
aaaaaaaaaa aaaaaaaaaa aaaaaaccgg ccgccctaaa ggttcaaacc ttacttaccc  120
ttgcatgcaa cttcatagcc ctccaaaagt gtcaccaa at ttcatttcac ggcctt    176
  
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<210> 5587  
 <211> 337  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-E2  
  
 <400> 5587

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taccggtcct atattcccg gtccacgggg tcaggaaaaa gtggggcggt ggtgtcatgg   60
gtccaagtc gcaggccaag accaaggcca gggaaaggct catcgccaag gaggctgcgc  120
  
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agaggatgaa ctaagcctag ccttatatgt cagagcatat gccatgtagt ttccctttca 180  
gtgtgtcctg attttgacga ggaactcgaa cccttttagc agcactgtgg aatcgtattg 240  
tggttttctg attctctgtt cggttcgcca gacttatgca aagatcagat gaggtttacc 300  
catgtttgga ttctatatag ttttatgccc tttgtcg 337

<210> 5588  
<211> 225  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-028-Q1-E1-E6  
  
<400> 5588

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gcaggttagt tagttggtgc cattcaatgc atgtgcaagc tcccgatc attatcatgg 120  
tcatcatcag ggtgtgatga tagcttagac ttgatcaatg gcacatatta gtacttaa 180  
gacgtgatcc tggttacggt tatccagtaa tctgatgcct cggtt 225

<210> 5589  
<211> 393  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-028-Q1-E1-E8  
  
<400> 5589

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ggtcagtata ttgaatgtac tggcaatttc acgctgtaga gcaatgctaa ataattggcta 120  
tcactacatg catatttggt tgggtggaggc tctaagttta atttttgcat aaagccaatt 180  
ttttcctaca acaaaggaat atattttatt taactataaa gtttggtgaa aacattgaga 240  
aggttcctcc aactcaatcc caaattaaca tcaataacct aacaaattat ttaaataacg 300  
tgatgagatc aacatgataa ttcaagaacc agatacccaa gatgtccaca accagggata 360  
cggctagtca tgactagttt gtacactctg ctg 393

<210> 5590  
<211> 371

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-E9  
  
 <400> 5590  
  
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 cgggtgtacc gcgacaacgt ggagtacatc gacgccacca agccggcgcg gcgacctcac 180  
 ctacgagctc ggcgagaatg agttcgccga cctcaccatc gaggagtcc tagccaggta 240  
 cgcgctgctc tacgatgggg tcggtgatga tactggcatc acgttgccctg tgggcgggtgg 300  
 cgacgccgag ctgtggctgt cctgcggcga caatgatagc tccttgagg ctccgcctcc 360  
 cagctgggac t 371

<210> 5591  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-F11  
  
 <400> 5591  
  
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 atgccgttct aagggaactct caaaatgata taagtgaagc atgagagatc aataatttca 180  
 ataaaatata accaccaccg tgctctaaaa gatataagtg aagcactaga gcaaaattgt 240  
 ttagctcaaa agatataagt gaagcacata gattattctc ataaattccg attaattgtg 300  
 gtctctctca aaagggtgtg acagcaagga tgattgtggg gaaacanaac gcanagactc 360  
 aaatcataca agacgtcca agcanaacac atatcatgtg gtgaataaaa atatagctcc 420  
 aagtaaagtt aacgaatgga cgaagacaaa 450

<210> 5592  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-F5

<400> 5592

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tatcttaagg tcatagttag gtttgcctta atgaacttgt tcgtatttgt ggatatttgc 180  
taatagttct aatcataagt gcataaaaat ccaagaaaga aatagtatgt tagcagaggc 240  
ctctcccaca tataaaaacta caatgacgat tatcgttctg ttatcaattg cctcccaaaa 300  
taagagtctc taccttagta caactttgta ctaaagttag tccaaagtca agacacttat 360  
ttcgggatgg agggagtatt aggataggaa ataccataat aattttcttg aaaca 415

<210> 5593

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-F6

<400> 5593

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atattgagag aaaacaaacc taaggagaga aatgtgtgtg tatgtgacgg aaagctactt 180  
gctaaacagg gtattcacga agagattgtg cgtgcgagat agagagcgat gtgcgggcct 240  
tgagggtggg agggggccgg tgagggtgtc aaaatgtgcg ccttgatgca tgtgttacat 300  
gcgatcgtgc gagggacgga cgaatcgaga gagatggttg ttgtgttacg gatgttcctc 360  
tctctctcac atacacacac acacaagtaa aatagaagac cgttctctca tgtatacac 419

<210> 5594

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-F8

<400> 5594

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gagttcaagc ttgggggatgc ccaagtaa atgagaggag actcaagtgt ctaatcttgg 180  
ggtagcccgga aaggcatccc atctttcttc aacaagtatc gatatgtttc agttttcggt 240  
tcgttcatgt gatatgctta aatcttggag tgtcttttgt gtttagtttt tgctttttat 300  
tttatgcaca atgctgggtat gatatagtc atggttgatt tatggaattc tctttgcact 360  
tcaattatat cttttgagta tggctttata gaatgcttca tgtgcttcac ttatatcatt 420  
cgaagttggg atgcttggtt cccc 444

<210> 5595  
<211> 437  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-028-Q1-E1-F9

<400> 5595

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taagaaagat gcctttatga aagcgtgttc ttctagttcc tatgaaaata atgatgaaga 180  
tctaaaagtt attgatgtgt cccctattaa atctttgttt tgcaatatga atcttgataa 240  
tgatcggact gaatatgac catctttacc tagaaggcgt tctaagaatt cagaatttat 300  
tggtcctgat gctaaatttg ataaaagtgg gattgaagaa attaaaacc tagatgttgc 360  
taaaccact atattggatt tcaaggaatt taattatgaa aattgctctt tgattgattg 420  
tatttcnttg ttgcaat 437

<210> 5596  
<211> 458  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-G5

<400> 5596

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ttgtcttcaa caaggtaatc cacatcatcc aagtcgagt atgccattct accgaccccc 180  
 tccaaacgat cgctcgagga ttgtcttagg ctgggtttaa gagtttcaat gatctttgaa 240  
 tcaaaagtaa ttctttttgc cacttaaggg gatatttcta cgagtcacct tccctaaggt 300  
 gcctcgttgt gggttcatgg caactcaact cctcgctacg ttgacaatcg attaccacct 360  
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 cccaaggggg tgtgcttcgt ctctcagctc aagagatg 458

<210> 5597  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-028-Q1-E1-G7  
 <400> 5597

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 gaatatctgg tgcagccgct tggccgtgct gaagacgaag agcattccag tgactttgag 120  
 ccagaagaaa atggtgatgg tgctgaggac gaggagattg aggatgatga tgctgaggat 180  
 ggtgaggatt ctgtcaaggc gcaatcctct tcgaagagga agaggctctgg cgcgaggat 240  
 gaagatgatg atgacggtga tgatgatggt gatgatgatg agaagcctcc atcaaagcga 300  
 tagtcaattt gttcttgctg atctgggtatc tttctgctt gggccaagaa ggaaaataat 360  
 cctcacggag aggggtgttg gtaaagtctg tagctttagg acatctgtgg t 411

<210> 5598  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-H5  
 <400> 5598

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 ggctggggag actatccgcg caaccctggt tcttggtgat ggcatcgggc ctgagatcgc 120  
 cgagtcggtc aagcaggtat tcaatgttgc aggtgtaccg atagaatggg aagaacatta 180

tgttggtacg gaagttgatc ccagaacaga gagctttttg acatgggaga gcctggagtc 240  
 ggtgcgtaga aacaaagttg gcttgaaagg tcctatggct acacctattg gaaaaggcca 300  
 ccgttctttg aatcttacat taaggaaaga acttggactc tacgccaatg tcagaccttg 360  
 caacagcctc ncaggctaca agactagata tgatgatgtg aaccttgtga caatccgtga 420  
 aaat 424

<210> 5599  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H7

<400> 5599

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 ataaatcctt ttacctagc ttctgatttc tattaccaga aacagattgt ctgttcttac 120  
 aggaaacatc taaaaacagc cgttattcgt tattgtgctc ttccatgttg cgccgctgac 180  
 aagaggatgg aggggttttag tcgtcgtcgc ggagaagaag ggtaaccacc aagcaggaga 240  
 gagggaggaa agctatgcc gttcgctgga agccaggcaa cccggcgcca tcgtcgagga 300  
 gagcgaggag gggctagatt acgccgccac agaggtgagc tacgaggggc tgcggcgctcc 360  
 ctgcatagga ggggggagag aagccgccac cgcaccacgt gattctgc 408

<210> 5600  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A1

<400> 5600

taccggtcca gaattcccg gtcgacgggc gggcggtgca gctgcgcac gcgatggcg 60  
 cgcaggtgac cgtgcagtat gcgcacaacg tgatcatcca caacatccac gtcaacgacc 120  
 tcatcgtggg caagggcggc aggatccggg actcgccgca gcacgccggg ttccgcaccc 180  
 agtccgacgg cgacggcgtg agcgtcttcg gctccaccga cgtgtggctc gaccacctct 240  
 ccctcgccac ctgccaggac ggctcctcgc acgtcatcga ccagtccacc ggcgtcacca 300

tctccaactg ccacctcaca aaccacaacg acgtcatgct ctteggtcc agcgacagca 360  
 accccaaaga cgaga 375

<210> 5601  
 <211> 463  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A4

<400> 5601

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 aagctcaaac tacactgacc atgttgccac ttggccaata tgcaaattca aatctacaac 120  
 caacaggacg catattcagt ttccaactac aactaagata accaatccac cggaactgaa 180  
 taacagtgtt ctctaacttc cactaaatgg aacttagtaa aaggtaaagt gtccatactc 240  
 gattattcac caagagaatc aagtactcag atttcgcaat ctaggtgaat gagtggttgg 300  
 aaggatgaac aaatgaatag gcttgaaaat gacaatatag gacttaagaa tgccctgttta 360  
 cataatactc ctccgttcac aaatagaaga tgtttttgat atttcaatta tggactacat 420  
 actacggaat gaaatgagtg aacaaacaca ctaaaatgtg tct 463

<210> 5602  
 <211> 67  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A7

<400> 5602

ctactcccaa tagtgagtcg tattagttgc tttagttctc atccatgac tatttttcta 60  
 cttcatc 67

<210> 5603  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A9

<400> 5603

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tctgtccaac ttgggcatgt ttgggtgtaga tagatttgat gcaattcttc cacctggcca 120  
gggagctata atggctgttg gagcctcaaa acctacagtg gcggctgata aagatggttt 180  
ctttagtgtt aagagcaaaa tgatgggtcaa tgtcacggct gatcacagga ttgtttatgg 240  
tgctgatttg gctgcattcc tgcaaacttt tgcgaaaatt gttgaggatc ctgagagcct 300  
aactttgtag gatgttcttg gaagtggctc atgagttggt caaccgtcag ttcattttcca 360  
gttggaagtc tatcgctgag tttgtttttc gttttcctat ctgtatcct 409

<210> 5604  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-029-Q1-E1-B10  
<400> 5604

taccggtcta caattcacgg gtcgacgggg aatactagtg ttaaagtttg tgattcccg 60  
agcatgcacg tatggtgaac cgttatgtga tgaagtcgga gcatgattta tttattgatt 120  
gtcttcttta tgagtggcgg tcggggacga gtgatggctt tttcctacca atctattccc 180  
ctaggagcat gcgtgttata ctttgctttg ataacttcta gatttttgca ataagtatat 240  
gagttcttta tgactaatgt tgagtccatg gattatatgc acttttcccc atccttccac 300  
cattgctagc cactctaata ccgcgcactt tttgccggtc tcatacacct accatatacc 360  
ttcctcaaaa cagccaccat acctacctat catggcattc ccatagccat tccgagatat 420  
at 422

<210> 5605  
<211> 472  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-029-Q1-E1-B2  
<400> 5605

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ccatggagtc atgttgaagg tggagcttga ttgaggggct acggtgtaag gatccagaga 120

gtcgaagcct attcagctgg gaaaaagcga gtgacatgca gtttggactg gagcctagtg 180  
gtttgatgga agcgtgaaac tcgtcatcgg tcggtgatga tcggtggtac tctgcagtgg 240  
gggttgagtg gtgtggttta ggcacccttg agactcgacc gggacagcgg aggctcgacg 300  
cgataatagc ggtgaggcat gcggtagcac ggggcatgga gacggggccag ggctctggtg 360  
gtcatacatg tggtgaggca actgcgaatt tgactcgggg tgactacaag caaatggtga 420  
aaatcctttc aggtttcaga caggcgggtca agaaatgagc ggtgatattg ag 472

<210> 5606  
<211> 385  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-B3

<400> 5606  
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agtaataagt atttgatggg ttgctagagt gacagaagct tataccctag tttatgcatt 120  
gcttcgtacg gggctgattt ggatccacat gtttcaagct atggtttaggt ttaccttgat 180  
acttttgttg tagttgtgga tgcttgcaat agtgatgagg acatcaatac aattgttaca 240  
cccacagccc ctgctgctat acatactgga ccaattacta gagctcgtgc acgccaacta 300  
aattaccagg tactttcggt tcttggtaat gattctaattg ttcattgagaa tatgatgctg 360  
cctaaattgg atacatttgt tttgc 385

<210> 5607  
<211> 456  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-029-Q1-E1-B4

<400> 5607  
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gcacgcagca acgaggcggg cgaggaggcg cggatcaagc agctggagct gcggcagggtg 120  
aacaagggtga aggcgctcgt cggcgccttc gagaccgtca tggacgacaa ccaaagcccc 180  
accgcgcgcc gcaagccgcg gctcaacctc ggcgcctgaa ctacgagtac attcgatgag 240

catgaagctc gatcgcgtgc gcctcctcct ttatccccgc tactctttaa tcacccatca 300  
 acccaatttg tcgtcgtcgc acacttatct ataattacgg tatcgcttat attctgcaag 360  
 gaggaagatg atggaagggt tatcatcatg atggtattat aataatgatc atggagcana 420  
 aaaaaaaaaa aaaaaaaaaa aaaaaaagcg gccgcc 456

<210> 5608  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-B6  
 <400> 5608

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 aatacaatgt tctccccctc tcttggtgag atctattcga tgtaaactct ttttgtggtg 120  
 tgtttgtcga gatccgatga attgtgggtt tatgatcaag tttatctatg agaaatattt 180  
 gaatctctc tgaattcttt tatgtatgat tgagttatct ttgcaagtct cttcgaatta 240  
 tcagtttggg ttggcctact agattgatct ttcttgccat gtgagaagtg cttagctttg 300  
 ggttcaatct tgcgggtgtc ttaccagtg acagaaaggg ttgcaaggca catattgtat 360  
 tgttgccatc gaggataaaa agatgggggt tatatcatat tgcattgggt 409

<210> 5609  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-B7  
 <400> 5609

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 tcgacaccga tgggtgacggc ttcacgact tcagcgagtt catctccttc tgcaacgcca 120  
 acccggggct catgaaggac gtcgccaagg tcttctgaat cagttcattt cacctcagcc 180  
 gtccgatcca ggagccgatc catctacgta cggcttcgta tatcaatttc atgcaactac 240  
 ctactccggt cccgatccag cctcagcttc acctgaggcc ggcctaatt ttgtttgatc 300  
 aatttttttg ctactagtag taactagtga tgatcactgt tgcaccattt atttatttta 360

tatcgtcaca actttccagt gtttcttttc tttctctacc tttttggcca ttgttcgggt 420  
 caagctcgat cgaacgatcc atgctgctaa ttgtttgtgt a 461

<210> 5610  
 <211> 254  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C10

<400> 5610

ggtctagaat taccgggtcg acggcgtatg tcatatttag gtaggaattt tagagttcca 60  
 gaactttgcg ttacttacag attgctacag acttttctgt ttttgacata ttctgtattt 120  
 cttgtgtggt ttgcttattt tgaggcatct atggatatta aattatttta taaacaatat 180  
 tgaagttgga atacattagg ttaatcacca attaattaaa taaggattta ataacgttac 240  
 ctaagttgga gggt 254

<210> 5611  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C12

<400> 5611

ggtcaagaat tcacgggtcg acgggcatta ctattttaat gtggaaacaa tttttagtgt 60  
 tcaaattctct tatgatactc ccaccattcc gaatgaaaag aattttgctt atgtggagag 120  
 tagtaaaaaat tctatgcttg tagatcatga aaagaatgct ttaggtgttg tttatattgt 180  
 tgaattcatt catgatgcta ctgaaaatta ttatgaggga gtaatatatg cttgtaggaa 240  
 ttgcaataat gtcaagtttc ctctctatgt gttgaaaatc ttgaagctat gcttgtttta 300  
 cttccaatg ctagttgatt atcgttccca taagttgttt gctcacaaaa tccctatgca 360  
 tacgaagtgg gttagactta aaagtgctag tcatatgctt tatgatgctc ccgttaa 417

<210> 5612  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum



<223> unsure at all n locations  
<223> Clone ID: LIB104-029-Q1-E1-C2

<400> 5612

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ctcaccctga tatttttcaat atccttctcc aaatttttga agatgggcat ctggcagact 120  
cacagggtcg cagagtttcg ttcaagaaca cattgattgt catgacatca aatgttggtt 180  
ctacgtcaat ttcgaatgga cgacggagca tgggtttctc aacagaggat actgagtcga 240  
gcagatatgt cgcggtgaaa tccctcgtga tggaagagct gaaaggattc ttccgtccag 300  
aattgctcaa caggattgat gagacggttg tcttccgtcc tctggaacag actcagatgc 360  
tggcgattct cgatatactc ctagaggaac ttaagggcaa gctcttgcc gtcgggatcg 420  
gcctanaggt ctccgatgcc atgaaggagc t 451

<210> 5613

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C3

<400> 5613

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agaaaaaagg ttctaccaa tattctagtt gatagaattt ctgaacttaa tgacgatttt 120  
gctattcgaa ataatgagct aggatattct ctgaatata ggctcaccaa gttctgtcaa 180  
aagaatgcct ataatgatga attggttatg caatatgaag ggccgaagga ggaacctata 240  
cctcctaagg ttgatcttgg ggatttttgt cccattaaat ttagcccttt tgattacttt 300  
tgcttgccac aaagaaagct tgctgccgaa cgtagagagt atgaaatgag ttttaatgat 360  
ctatcttatt attatggcag tacctag 387

<210> 5614

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C4



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 accaaccatg ttctcgtgag agaggagcgg agtccactcc tcttgagaat aaccaccta 180  
 gcatggaaga tacaacaac cctagttgat acatgagcta ttcgagcata caaaacggaa 240  
 tttcatttga aggtttggag tttggcacat acaaatttac ttggaatggc aggtaaatac 300  
 cgcatatagg aaggatatgt ggactcatat ggaataactt tggggtttaa ggaattggat 360  
 gcacaagtag tattcccgtc tagtataagt gaaggctanc aaaagaatgg gaaacaacca 420  
 actagagagc gacaacagtc atgaacatgc attaa 455

<210> 5617  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-D10  
 <400> 5617

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 ggctttactg ggcgcttcta catgtcctgc tggcagatca taaaaatgga cttcatgagg 120  
 gcgctcgacc aattccaccg aggagacatg cgtggattag cggtgatcaa taaggcacta 180  
 gtatcattac tacctgatac gtctccaacg tatctataat ttttgattgt tccatgctat 240  
 tatattaccc tttttggaag tttatgggtt ttactttaca cattattatc atttttggga 300  
 ctaacctact aaccgaaggc ccatcccata tttgtagcga ccagacctca aacagtccga 360  
 tctctgtgca tcagtgtcat ccttgggtca gtaatgtga cagcacag 409

<210> 5618  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-D11  
 <400> 5618

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 aagcagccgc ctggcagtcga gaagggtgcc tactacgcca tccatcacat gcggggcgatt 120  
 gtacggggacc agcatcaact tctgctaccg agtaaaactca aagattgggc cgcgagcatg 180

ttggcaatcc aggacgcgga catcagacaa gaattctttc gcatccagtc ggagtttgca 240  
gaaatcatct atcaagatgt ccttcgtacc tcggggcagt tctacctcag aaatcaaccg 300  
tccaacagtg acatcgacac aatgctacaa atgcaggctg acaatgaccg ttatttcatg 360  
actcccatga tagacggcga ctccatccac gtcgcggtcc 400

<210> 5619  
<211> 453  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-D2

<400> 5619

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cggatggccg gactggcaag gatgatgcgg atctctctcc tgaagacggg tcagtggttt 180  
gatgatgatg gcagcttgta aaacgtgtgc gtgtggtgta cgcttttaggt ctgctgcacc 240  
ggctgtttgt tccgatacgt tatgtggatg aatcggcaat gacaccggtt ttagatatga 300  
ggagtgaag cactccacat tatcggttt gttaggtgta atggtggctt cgggtgacct 360  
gacgtatgtt ttggtcagtc ctttgctgaa taagttaata aagatggccg tatgcatcaa 420  
ttgatgcaga ggccggaggt ctcaacctcc ttt 453

<210> 5620  
<211> 454  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-029-Q1-E1-D3

<400> 5620

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acaataatag cacctacatc cggaagggtt gccagtttct attatcaaag cagctaagga 180  
atggtggatg gggtgagagt catctttcat ccacaaccaa ggcatacacg aacctagacg 240

gggagaaatc acatgtagtc aacaccgcat gggcaatggt ggcactaatg aaagctggac 300  
 aggccgaacg agatccgtct cctttgcacg aagctgcaag acttatcatg agcatgcaac 360  
 ttggcaatgg tgacttccca cangangaaa tgaatggaat ttccttgana aagggtccct 420  
 tgtgttatat ggcttatcgc aacatattcc ccat 454

<210> 5621  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-D5  
 <400> 5621

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 atgccgagca attgatagaa aatcgcatag ttatgagaat atctaggcat gatcataaac 180  
 atacgcatca cgtccgtatc aagtagaccg aatgattct gcatctacta ctattactcc 240  
 acacatcgac cgctatccag catgcatcta gagtattaag ttcataagaa cagagtaact 300  
 cattaggcaa gatgacatga tgtagaggga taaactcaag caatatgata taaaccccat 360  
 ctttttatcc ttgatgtcaa taatacaata tgtgccttgc tggccctaaa gtcaattgga 420  
 aaaggacacc gcaggattga acccaaagct a 451

<210> 5622  
 <211> 264  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-D7  
 <400> 5622

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 cggagtctca gctgtgtgta catgtttagt ggtaggagct cctgggtctt ttgattccag 120  
 tgttgtatga aatggcgcgga tggatgggtt ctaggagttt ttcttttgga cgggggatgt 180  
 acgaaactga cttgcgcgcg tctctccgct cgtgggactc ggggaaacag tgttcccctt 240  
 cgaactgttg tcctgtatgt ttg 264

<210> 5623  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-E10

<400> 5623

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 gtttttcgta gtttagatcg agtctgttct tcatacctac agtccacgaa aaagccacaa 180  
 aaaaattagg gttagttcag tatatccgaa ccaatctgag cctttgcata atcttttagg 240  
 gtttttgctt tgttgaattt gcgggttgcac cgtcatgtca agttgctggt cttagagtct 300  
 agtcttttag agtttcgagt tctggtcata agttgtcacg ccgccgccgc accatcatca 360  
 tcgccttgcc atctaccact attgcttatt cgccaccgct ctgaat 406

<210> 5624  
 <211> 476  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-029-Q1-E1-E3

<400> 5624

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 acctgtacat cggcctcgtg tcagtgttag cgtcagcggc gtcgcccctg acgcacacta 180  
 tagagacggg gcggcggcct acgcgggcct cgccggtgcc cacgatcaag aggaagacgc 240  
 tgccgtcctc ctccgagact agcaggaggc ggtgatcctc cagcgactcc gacatggtga 300  
 acgggtagca catctcgtac ttgatgttct ccgccaaggg ccagcaatgg acgaagggtc 360  
 ccttgagggc atcgaccagg ccgtccatga aatgggagtg gctgttaggg aacatgcgca 420  
 agttgantat atgagcaagt tactatgaga ttaaatccga ataagcacia aataaa 476

<210> 5625  
 <211> 453

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-E4  
 <400> 5625

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 gattcaacat ctctgtgtt ggaatcattg tctaccgtgg tctgtacttt ggactgtatg 180  
 actctctgaa gccagttctc ctactggca ctctccagga caacttcttt gccagctttg 240  
 ctcttggttg gttgatcacc aacgggtgcag gtcttgcac ttacccatt gacaccgtcc 300  
 gcagaaggat gatgatgacc tctggagagg ctgtcaagta caagagctcc ttggatgctt 360  
 tccagcagat cctggcgaaa gaaggtggca agtccccctt caagggttct ggtgccaaca 420  
 tcctccgagc cattgctggt gctggtgtgc tcc 453

<210> 5626  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-E5  
 <400> 5626

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 aacgtgtgtg ccaggagggc atatcccgga cggtttctgg gtcgtgtggg aaggaccccc 120  
 cctatcgccc aactcactt ggcgacgggtt ccaaatgtcg tcgcggaaag gggtaaagaa 180  
 ttgtttgttt aggatcgacg gcacaccagt atgcgcacgt agttcaaatt tgaattatgc 240  
 acataaatgc attgagaact cagttaatgc ataaaaatgt ccaaacgaac cccgaaaaat 300  
 cataaaaatt cacacaacgc tccggttgtt ctatgttgac acgagaaaaa aaaaatgaaa 360  
 gcaataagag gcaatggata tcgtttcctc cccaaa 396

<210> 5627  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-E7

<400> 5627

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caagaggccg atggtgatgg caacgtgatc agccaaccag cagcttgctg gacctcttc 120  
tctctggatg cctaaagtca gtatgtcaat gtaatgtaaa catccctttc ccttccct 180  
ttcttcatgt agcttcggtc tactccttag tagtcttggg aaagcttggt ctttgtagtt 240  
gcttcagcta ctggtactgt ctattgtgtg tgatgtaata tattatggac cattatggca 300  
ttccttttca aaatcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaga aaaaaaaaaa 360  
aaaaaaaaa aaaaaaagc ggccgct 387

<210> 5628

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-E8

<400> 5628

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tcttgactgc ctaccatttt ggtctaaccg gcctcgggtg ctcttggttg cgggttgctg 120  
ccgcttcggc atggcgcttc gaattccatc cctataaaat accatataca caaggtaggt 180  
gaagtgtcta aaatgagatg cctgcagttg ggattttggt tattcgaaa tgcgacgcat 240  
ggagctgtcc aagatactcg gacgtaatgg ccattatggc atcagcagac ctcaattgaa 300  
agaactgact gattatcatc cccatgaata tgcaggatc atcgtcgagt ccgaggacca 360  
tggtccagtc aaggatcatc ggttggtgat atgggctggt 400

<210> 5629

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-F1

<400> 5629

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gggacgagt atggtctttc ctaccaatct atccccctag gagcatgcac gtagtacttt 120



gtttctatga ctaatagatt tatgcaataa gtatgtgagt tctttatgac tattgttgag 180  
tccatggatt atacgcactc tcacccttcc atcattgcta gcctcttcgg tatcgtgcat 240  
tgccctttct cacctcgaga gttgggtgcaa acttcgccgg tgcattccaaa ccccgatgata 300  
cgatacgtc tatcacacat aagcctcctt atatcttctt caaaacagcc accataccta 360  
cctatcatgg catttcata gccattccga gatataatgg catgcacctt tcatcatcat 420  
catatacatg acttgagcat ttattgtcat a 451

<210> 5630  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-029-Q1-E1-F11  
<400> 5630

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aaggctgcca ggaaattccc caaacttcgt gtcaaggatg ccgatgctac ggctctgaat 120  
gtcttcaaga ttctccgggg cagtcagtc gatggtcata aagatgtaac ccttcgtgaa 180  
gaatgtctac ggctctgaat gctacgggtc tgaatgtcta cggctctgaa tgtcttcatg 240  
actctgagga ccttggtgta gattcaggaa gaagaagaat gaagatggcg ctactaggaa 300  
gcaatatcgt ctcttgctct aatatgaact agctttgcag tattgtagta tttgaatctt 360  
tcctatgttg tcgctctgtg tctcgatctt caaaactgct ggacggatgt gatgttttg 419

<210> 5631  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-029-Q1-E1-F2  
<400> 5631

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tcattaggac attttagtac attgactgat tttctacggg tataatgtgc aaaaatcaaa 120  
tttgagctac atgcacacat gacagtgcac ctaaattggat tgcaaaaaca catgtgtctc 180  
actgggtgca tgtttactcc tcgtgcaaga aatttcaaac attgagactc ttaattttta 240

aattctagta catccaaaac ttatctaaag ttcataaaac ttatcatggt gtcactctaga 300  
 caccaataca aagtggcatt gtactttttt gtcaaatttg agaccagttt tgggtgaata 360  
 tgtatctaata tacaacacggg agattattaa taatttggaa accattatcc caaatgaatt 420  
 atttattcga accgtgagcg ttagacaaaac aatgg 455

<210> 5632  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-F3  
 <400> 5632

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 acacgcccac ggccaaggag attgtggaga aggcgtgctg ggggaagagg agctgctgctc 180  
 tggccgtgtc gcacgaggtg tacggcgagg acctcaactg cccgggcacc acggccacgc 240  
 tggccgtgca ggcaaagtgc tccaagaggc agaggaccgc cgagcaataa gtaagctaag 300  
 ctcagatatg tactgctatg tagatcatct catcaccttc acctttgccg accatggtct 360  
 ttttcatgct gcttg 375

<210> 5633  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-F4  
 <400> 5633

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 accggcccag ctacggccgc aagaagaatg acgacgacga cgacgatgag aggcgggtcgc 120  
 ggtacaagaa ggcgacgac gacgacgatg atgagaggaa gccacggcac aagaagtgcg 180  
 acgatgacga cgacgacgac catgagagga ggccgcgcta caagaaacgt gatgacgacg 240  
 acgatgacga cgatgacaga aagccgcgtt acaagaagcg cgatgacgac gacgacgatg 300  
 atgataggaa gccacgttac aagcacgatg atgatgagga cgacgacgat gataggaagc 360

agcgtcgcgg ggacaaccgc cgccggcacg aatacgaatg ttgatcaagg catcatgaca 420  
tgagtttagc tgacgctaag aagcatagtt gc 452

<210> 5634  
<211> 370  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-F5

<400> 5634

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gaagcacgcc ggggcccgcct gcggcgccac catcctcgcc aagtgatata ctagagctac 120  
aatgtcattg ctgatttcta gcgtatatga tcgtgtgctg tgtgtagtag tatgtatgtg 180  
tgcagatttg tagttgtttc cctgtgtata attggatccg gtgcatgcat ccattcccct 240  
ccattgtgta taccacacca ttcatggac agcaccaggt gtaggttatt tctctgaatt 300  
attcagatgt agtagttctg aacttctcag ttgtgataat atctatggga agaattgtga 360  
ttattctgcc 370

<210> 5635  
<211> 427  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-F7

<400> 5635

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gaggcaaccc aattttgttt gtgttttttt tctgttttag taataaatct tgcattctacc 120  
ttctgttttag atgtgttttt atcttttaat tagtgtttgt gccaaagtaga acctatagga 180  
taacctatga tgatagttga tttgattctg ctgaaaaaca gaaactttgc acgcacgaat 240  
ttaattttgt caaatcacag agacgtgatt ttgcgttgat tctttttgct gatgatcaat 300  
agacagattt tccaggactt actattttgg tagggttttt agagttctag aagtttgcgt 360  
tagttacaga ttgctacaga ctgttctgtt tttgacagat tctgtttttc gtgtgggtgg 420  
tgccctaa 427

<210> 5636  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-F9

<400> 5636

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 tttaagctat gcttgccagg ataaccgtgt tcttcaaadc agtgatggaa cggggggcaa 180  
 gaaaaaagtg gttatacttg gaactggttg ggcaggtgca agtttcttga gaaatatcga 240  
 cacttctttg tatgatgtcc atgtggtatc acctcgcaac tattttatgt tcactcctct 300  
 gttgccgagt gtgacatgtg gcacggttga agcacgcagt attgtggagc caattcgcaa 360  
 tattgtgaga aagagagggtg gtgcattcag attctggga 399

<210> 5637  
 <211> 328  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G1

<400> 5637

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 aagtggagtg cagtgcagtc agccagagga agacgaaggc gtttctatca gtccgatctc 120  
 ctgccccctt tacatgatga ttattattat tatcttagtg catgtgtatg taatatccac 180  
 catgaactga tggtacagta gactgccaca ttggtagtgc agtgcagcac agcacataaa 240  
 aaaaaaaaaa aaaaaaagaa aaaaaaaaaa aaaaaaaaac aaaaaaaaaa aaaaaaaaaa 300  
 aaaaagacat acaaaaaaaaa acgaaaat 328

<210> 5638  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G3

<400> 5638

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ctcgcagata tagtgatttg tgtgttttac gtagcagatt cgggaggcac ttatggcatg 120  
acatcattgg cggagacgga atataggttg ggtacaatca tgtgacttca gaatcatgct 180  
ttatgaacag gtttcatgag catgggtcaag cgcgatctgc gaatacgttt cgtgaccatg 240  
ggtcattgtc atggagtaag ccaatccatt gacactccta tggacccatg gatgatttac 300  
atttttctct tgtcccaatt catccacata tgtatccggg tatccacacc cttctaactc 360  
ggccccatcg 370

<210> 5639

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G5

<400> 5639

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atcatgagag aacattcaag gagtggatta tttggaaatt agaaccttca gatttcttag 120  
aacttcactt ggatttatgt gaatataagc gtaagaggtc tagtggcaat gctacaaaat 180  
cactgcaggc gatataataa cggtgtgat agacggagac tgaatcagtt gacactactt 240  
tgatgtctat cgagccaatg ggacaacaaa gtccttgag aaaagaagaa ccggaagcgg 300  
gttatctatc ttcacgagca agttggcgtc tgtaaactt caccggagcc attccagctc 360  
tttcagagcc acaaggcaag gaagttgagg aaccaagacc ccaacggtgc aaaacaattt 420  
ggcaatcgaa aggactaggg ctgccataag ggacctgta 459

<210> 5640

<211> 280

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G7

<400> 5640

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ttacgttgca gatccgggag gcacttatgg catgacatca ttgggggaga cggaatatag 120  
gttgggtaca atcatgtgac ttcagaatca tgatttatga tcaggtttca tgagcatggg 180  
caagcgcgat ttgcgaatac gtttcgtaac catggggtcat tgtctttgag taattcattc 240  
cattgacact cctatgggcc catggatgat ttacattttt 280

<210> 5641  
<211> 457  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G8

<400> 5641

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atgaaataaa cgaaataacg ctcttggtaca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggcccccaaa 240  
aaaaaaaaaa aaaaataaac cccccaaaaa aaaaaaaaaa ccccctaaaa aggccccaaa 300  
aaaaaataaa atggggggccc ttttaaaaaa accttttagg aaaaaaaacc cggattttaa 360  
aaaaaaaaac ctttaaaaaa aaaacccctt tttaaaaagg ttggaaaaaa aaaaaaagcc 420  
cccaaaatta tcccccaaaa aaaattttcc cccaaaa 457

<210> 5642  
<211> 458  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-H5

<400> 5642

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acctgaccaa gctgctttta tcttgagcat accaaagagg aagccactgg acgagaccca 120  
ggaaaccctt cgaacttctg ccttccccag taaccacgtg aaggaaaagt gggcgaagaa 180  
cctgtacatc gcctcaatct gctgcgggag aaccgcgtgt tgacgacgta cttgagctcg 240  
acggcgaaat cacccgagtt ttaccactgg agccagaaga gagttcgaga cggaacaaac 300

tcagcgtaa ccttattatc taggtttcga ggcgaattgg ctgggcgctg acactggccc 360  
 ggectctttt ggttggcggc acgctattcc aattggtaag aatccttgca aaaatccttg 420  
 ggggtggtgt atcagtcctc atcggtatgga tatgaacc 458

<210> 5643  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-A1  
 <400> 5643

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 gaccgcgagt tttgaacgct gtaagtacac atcgtgagca tggaggacga cacaaccccc 180  
 gcgccgcccc cggctctccg gcgcacgcac gcacgcacgc tcttgaagaa gaagaagaag 240  
 ctaaattgtca tgtcagttaa cgctgaattg cagcggccgg ccacgatcga ccgtccggcg 300  
 tgaagagacg gacgacgacg aattccgagc cgaccatccc accggcatgt agtaatgtaa 360  
 tcccttcttc gtccccagtt ctccaccgcc tccatgatca accgttaaac tccaagccc 420  
 tacaactact actactacta ctactactac tatca 455

<210> 5644  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-A10  
 <400> 5644

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 ttgtcttgct tggagtgctt acccttggtt tccctactga agaagggtcca actctccagg 180  
 tcttaattctc ttgtgcggca aatatctatt tcctttatca gcggcttaaa agtggatgga 240  
 aatcattctt ttatgggttc ggctccttct ttgcttcttg gtttcttgcc acattcttga 300  
 tgggtatcgg aattccgcct atactgcctg gtccaagaaa cttggaagtg agcacggcat 360

gtgttgctta cgcattcctt tttgtatcat caaccttcct gaaattacca aagtttggtt 420  
 tt 422

<210> 5645  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-A2  
 <400> 5645

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 ttcaattcct tattccggag cctcatcaaa attctcgggtt tcaattgttt catcttctct 180  
 tcccgcaatt ccaagctctc tcaattatat catcacaag atccatccaa gtcactacaa 240  
 ggattcacct tgtgctttca acttctcttt ctttttggtt gatcattctt tcattaccgg 300  
 agttcttcat gaaggttcta catgatggtt tcatcaagga ttaatttgt tctcgaagtg 360  
 ttcatcaaga ttcttttcag aggagttcaa gcattcttca tcttgctatc cggagtgcaa 420  
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<210> 5646  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-A4  
 <400> 5646

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 acaatagaaa caatgtcata tgatgacccc tcgtgtgctt atactatata ttattttaag 180  
 caacatagta tatatgtaca ttggctcgag attacaaata tgtaatgata cttattttat 240  
 gtttattttt acccctctgt atctaaaagg aagtataaag aaaggtctta tatttttaaa 300  
 aaaaaaaaaa caaaaaaaaaa aaaaaaaaaa aaaaaaagga aaaaaaaaaa aaaaagaaaa 360  
 aaaaaaaaaa gcggccgctc taaaggatcc aag 393



<210> 5647  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-030-Q1-E1-A6  
  
 <400> 5647

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 aggtgtagac ggattaggag gtctaggtgc tactgttgtg gattcttttag aactgcaat 180  
 aataatgggt gctgacgata ttgtgtctga agcatcaaaa tggattgaag acaacctaata 240  
 gaaaaagatc agcgagaaag ggcagggttaa cttatttgaa accactatcc gtgtcttggg 300  
 agggcttctt agtgcgtatc acttgagtgg tggagaccaa gcaggaggag gtgattctgg 360  
 gatagcagta acacctaaca agactaatcc agatcgtctt ctggcaatct caaaggattt 420  
 agcagacaga ttattg 436

<210> 5648  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-030-Q1-E1-A7  
  
 <400> 5648

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 aaatcagtac aattacgtct cgatgaattg gatagactag aaggaaggcg acttgaagct 180  
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 agaagggtcgt tcaacaagg agatctagta cttgcggtca tccgtcctat gaatatcagc 300  
 cgacggatga aaggaaaatt tgaacaaaaa tgggaagggtc ccttcgtcat aaaagaggtt 360  
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 aatgagaaat ccttaagcat tac 443

<210> 5649  
<211> 426  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-B11

<400> 5649

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ttccttcaac caacgagctt caaactgggt gtatcctctc ggttgctgca ggttacctcc 180  
gacagcccct taagtatcca ggaaaacagt tttgtggtaa gatttttgtt ttctgcgggt 240  
acaacctttg catttggaaa tacaccatga aactctccat tacaacaac cgtatccagt 300  
cgttcccggt gcctcatcct tctccatgta aactgatctc cggtaaacc cctatcttca 360  
actcacagtc aatcagagca tcacagaaat cttgcatcat gtgcatcgga tgtggagctc 420  
gtccct 426

<210> 5650  
<211> 437  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-B4

<400> 5650

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ttttgtggcg cgccgcggtg tcgctgtgag cgagtgtgta cgggctgttc cgtggtgtgt 180  
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ggtatgcgtt gtgtgtgggt ggggtgctgta tatttgcgta cctctatgtg tactgaccgt 300  
gatgcgttgt ttgtccgttt tatctctcta tatattgtcc gttgtttgtc cgttcggcat 360  
cccagctggt gcgtcccagc cgagagattt ggcacgcgga gaggaggaag atccgcgatg 420  
gacatgggga tgcacga 437

<210> 5651  
<211> 378

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-030-Q1-E1-B8  
 <400> 5651

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 aacaagtttg ttttacgtat gccatgtact caaaaaagtt cccacagaa aaaagttcca 180  
 aaatcccggg ttgcctttt ctgacaggca attgagcatc cttcactgaa gttgtgtgtg 240  
 tgctcaatca gtcttcagcc gtgggacttc actgaacctg gttcacagag ctgttcattg 300  
 gaagactgcc aacgtcgtgt gttcgggtcc tgggtgtgct gcttctaccg aatacatcca 360  
 cgacatgaat ttgttcac 378

<210> 5652  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-C10  
 <400> 5652

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 ttttctccag ggagatgtga taacaagttt cgacggtgct tcggtaggat gtgaaggaa 240  
 agtaccattt cgggtccactg agcggattgc tttccgtac ctcaacagtc aaaagtaagt 300  
 gcttctcac aagtaccatc attttcttaa tcatcttgaa gtgcttttcc taacctttt 360  
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<210> 5653  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-C3

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gagctctact cactcgtcac cgttgcccac gtgcctgctg agggtttgaa ggggctggga 180  
accaaggctg tcgatgacac tgagtagact cttttcttta tctacatcgt tagaatgagc 240  
tgttatttgg aattgcacca gcatgctttt tgtatcccgc agaagttttg gagtatggaa 300  
tatctggagc tatctatttt ccttcactta aatcttgatg attgggtttg tccttcatac 360  
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<210> 5654

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-C4

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taaggagacc ttcttctcct ggtatcgtga agacttggtc ccctaatagga aaaagagttt 180  
caccgccaca taatgcactc agcatttcac caaaccgaaa aggagggcgg aagctgatac 240  
tgaaatcgat cccctccttt ccatcactgg ttggggacac gagcgggtgga tctgcaatat 300  
gcagctccga cagcacaaca gctcttgctt taggtccatc gtaaaagctg ggctgggcag 360  
ccgattatcc gcgaccggag tacgacttgt agtccgataa tgggtacctcg catatgaact 420  
ctgcggcaag gctcaagta 440

<210> 5655

<211> 285

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-C7

<400> 5655

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 agtgagcgcc tccgtgaagg aggataacca aggggaagaa tctgaccttc tctcgcttcg 180  
 aggaatgaag aggactgcct ctgaagatcc ggaaaccaat gtttccaaac acgagaagaa 240  
 ctctccacca tagggttctg ccttggacgg tgctcttgcc gcaca 285

<210> 5656  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-C9  
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 attgatctga ctggcaatgt tttcttttca taaaactttt gatctattca taacatcatg 180  
 gcagcataaa gaacatcaaa aataataaaa catagtaagt aataacaatt acattgagca 240  
 tttcaatgga aaataaaatt gttgccaatt tagtaaggaa tattaatgcc catgacaacg 300  
 cctgggaaaa aatctagttc ctatgaacaa agatagaact tggggtagca ttcgagtaaa 360  
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 <211> 381  
 <212> DNA  
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 <223> Clone ID: LIB104-030-Q1-E1-D11  
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ctcggggcag ttctacctca gaaatcacgc gtcgaacagt gacatcgaca caatgctaca 300  
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cgcatccggg cccttgagtc c 381

<210> 5658  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-D2  
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aacagccacc atacctacct attatggaat ttccatagcc attccaagat atattgccat 180  
gcaactttcc atcattccat tcatcatgac acattcatta ttgtcatatt gcttagcatg 240  
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cactcttggg ccattgcata tcccgggtaca ccgccggagg cattcatata gagtcatctt 360  
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t 421

<210> 5659  
<211> 440  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-030-Q1-E1-D3  
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tcggcctgat gaacatcggc ggcacatcgc cctcgggcgt cgccatggac cgctacggcc 300  
ggaagctgct cttcgcgata tgcggcgccg tcatgttcac ctgccagggt gcaatggcga 360

gcatcgcggg gacgcacctg nggcacggga gcaagatgcc caaggggtac gcngtggcgg 420  
tgctggtgct gacgtgcgtc 440

<210> 5660  
<211> 270  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-D4

<400> 5660

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gttcctgaga ggcacgcacg tgacgcgtgt cggccttctt ctcaccgata ctcttccgga 180  
ccataagggtt cggtagccac tccgccctga cgggcacat catcctccgc ctgatccaac 240  
atccgaggta gcaactctc cggcgtctcc 270

<210> 5661  
<211> 419  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-D6

<400> 5661

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ctattgctac ttccatcgcc ctgcactgat ctgcaaatgc agtcaacat tcattttatt 180  
gaactagtat atatattgaa aaagagacga catcaciaag agtgtgctaa caagaatgga 240  
aatcaatac actagtctgt cagtgagtga ttgtgtgatg gcctgtgctc acttatgtac 300  
cagccgttgt catttgatcg gagtaactat atcattgtgg gacacttgca acggtaggaa 360  
cgtgtgttac tatttttggg accccctgtg aacatttgaa caaaaagagc aaatgtttc 419

<210> 5662  
<211> 146  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-030-Q1-E1-D7

<400> 5662

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acaaccatag gcgcgggagc actaat 146

<210> 5663  
<211> 438  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
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<400> 5663

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cataatgtgg ctcacattgc cacaattata gcatgtactc acacgttgct tgcccttgga 180  
gccacttgag ttgttcttgg agaagttggg ccttgagttt ctcttgttgc cccaaaattg 240  
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ttcctcctcc tctcctctct cttctctctc ttcttctctt tcttctctct ccaggatagc 360  
cttggccttc aaagctaggt tgggtgagga tttttcgacc gttggacatg agctagagcg 420  
ttgtcngcgg tcttgttc 438

<210> 5664  
<211> 424  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E10

<400> 5664

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tgcggcgggt gacggacggg cggggcggcta gaggcgggag ccgccattgt tgtaattaa 180



aagattagta gccaaagtga atactactag gatcatccat gatattgctt ttttttcctt 240  
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 ttcttgatct gagcttgccc atggcaattg gtccctccatg tttgtagtat gcttgtaccc 360  
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 agaa 424

<210> 5665  
 <211> 106  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E11

<400> 5665

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<210> 5666  
 <211> 359  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 5666

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 tcaacttgty tgtctagagg tgccccctgc ccccgatat aaaggagcaa gggggacgcc 240  
 ggccggccct tgtggggcga ccaaggagga gaagtcctcc tcttggtagg agtaggactc 300  
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<210> 5667  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E3

<400> 5667

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gctcatgggt cggctcatcc attgagacgt aagggtttga tattgtaacc cgcatttcgc 180  
cgcctccatt gtatgtatat ttattctgtc cgagttgctg ttgttgcgta aaactgtggc 240  
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catcatcagc actggaaatg ctgttgtttc gcagaaagtt caagtttggtg tgctggtttg 360  
tataaatttg gtcatttttc taattgggac tcgtttggaa gatatgtttt atgttttttg 420  
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<210> 5668

<211> 443

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-030-Q1-E1-E4

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agcgagcttc ctaacgaatt ttttctgcag ttctgagcg accactaagg tcaagacgag 360  
caccaggaaa caagtgccca gtgaagaaga agctaccccg aacgcgcaaa gctaagttac 420  
ctccacacan aataacgaca cag 443

<210> 5669

<211> 236

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E6

<400> 5669

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tgtcaccatg tgaactatac atggaacgaa gtatctctat gagacatatc atacagatta 180  
tcgctgcctt ccaatgccac cttttgcttc tgccacccat cacatatcac tgaccc 236

<210> 5670

<211> 173

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E7

<400> 5670

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<210> 5671

<211> 254

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E8

<400> 5671

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacaaaaaga 180  
ataaaaaaaaa aaaaaaaaaa taaaagaaaa ttcatacatc ctatagaatg taacctaaat 240  
tcaattcaat ggaa 254

<210> 5672

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F10

<400> 5672

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ctcgctacat tccaatatatt gctcttttct cccactatt tattctacaa ggagctgggtg 180  
tccttttctc gataggaaga ttggtggaga aagttgtttt gctattgcgt aatggaccag 240  
ttagtccgaa ttaccttaca gtatcatcaa aagtcctga ctgtttcgct tttcttcac 300  
acgggtcaag gcttcttggt tggtgggtcta ttgatgaagg gagcaaggaa gagcaagctc 360  
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<210> 5673

<211> 232

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F11

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ttgtccatt ctgacttcag tgggcgctag attaattagc cgctctccat gattgaaact 180  
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<210> 5674

<211> 265

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F2

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agtgcaggca aagaagaaac aaaaagggcg gacgcccaac aggggtgaatt gtctaagcgt 180  
ggatgcaatg agagttcagc catcgtaaat cttgacttgt aacttctagt ccatcgaaat 240  
cgctatcaaa gcttcatgac tggga 265

<210> 5675  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F5

<400> 5675

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aagcttgtgt aatcctacat ttttctcctt gggttcatgt tctcggcaga atgatcagga  180
aagctgtgca cgttgtggtg catttacaaa gacagtgaga tggacatttg ttttttgttt  240
agctcatgca ttgcttgc atcttttttg gtgattgatc tttatctgtg gtttcgatgc  300
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<210> 5676  
 <211> 287  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F6

<400> 5676

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gccagctgaa agagatgggc cttactgccg taggaccccg gagaaaattg atacaagcta  180
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-F8

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gagggcatgg ggctctcgga gttattcgtg taacttgata tgcacttctt cctctctcat 180  
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<210> 5678

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-G1

<400> 5678

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ccatgcctac ctatcatggc atttccatag ccatactgag atatattgcc atgcaacttc 300  
catcatcatc atatacatga cttgagcatt cattgtcata ttgctttgca tgatcgtaag 360  
atagctagca tgatgttttc atggcttgct ctttttttta tgtcattgct acgctagatc 420  
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<210> 5679

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-G2

<400> 5679

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ttctaggaga aatcggggcg ctccctgacg tattcgtgga gcttgagatc aacttcttcc 180  
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agctcaccaa gggggagatc ctgatgetta acatcggatc catgtccacc ggcgcccgtg 300  
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 aaggcgagaa ggtcgcgttg agccgcgg 388

<210> 5680  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-G5  
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 gtttggtaca gtaccttatg tggtggtttt gctttctttc actaacgaag cttatgagat 180  
 ttctgctga gttttgtggt gtgaagtttt caagttttgg gtaaagattt gatggactac 240  
 ggaataagga gtggcaaaag cataagcttg gggattacca tggcatccca agatattcaa 300  
 gaatagccaa aagcctaagc ttggggatgc cccgggaagg catccctctt ttcgtcttca 360  
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<210> 5681  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-G6  
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 gtaccgtgca acttttgccg gtgcattaaa cccaccatat actgttcctc aaaacagcca 180  
 ccatagctac ctattatggc atttccatag ccattccgag atatattgcc atgaaacttc 240  
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attgcacatc ccgatacacc gctgaaggta ttcatataaa gtcatatc 408

<210> 5682  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-G7  
 <400> 5682

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 tccttccaac gggggcggcc acgcttcagg ctactcaaag gaggtgacc caaccacagc 120  
 ttgaaagctg aagcactaac cacaacatca acatccaacc tttttgacat ttgcaatccc 180  
 agttttcaca ttaccatcct tccccacctc tttttgcttg tgggtgtttc ggagtctgta 240  
 gctatttagt actttctatg tcgtgggcta ccagaggctc cctagaggct gcaaattttg 300  
 tcgctgagta gaagcaaggg aacggacgga ggggtgtccc agtttctcct gaggctatat 360  
 gcgtgtatta actgaaggcc gtggaaggca aaactcgtgg ggagctctct gagatttttg 420  
 actgt 425

<210> 5683  
 <211> 371  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-G8  
 <400> 5683

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 catcatgatg gtcagcctca acggtatcgc cgtcggattc agtcgcatga tctatagcca 120  
 gagtgcgca atggggggag ctctgggca gagtcttctt caccttctgg gtgctagctc 180  
 acctgtatgc gttcgccaag ggcctcatcg ggcaccgctg ccgctctaga gcgatgtagc 240  
 ttacatacgc gtgcatgcta cgtcagacct cttaaagatt gtcactcaat ttgaactcat 300  
 tgggggtcca tttaaaatgt catgattggg acaaacctcg actgttagta atttaattgg 360  
 cttggactaa a 371



<210> 5684  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-G9

<400> 5684

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 cacaaaagct aaaaggcagg ttctatagga tggccattcg acccgtaatg ctgtatggcg 180  
 ctgaatgttg gccgactaaa aggcaacatt gttcataagt tagggatagc ggagatgcgc 240  
 atgttgaggt ggatgtgtga ccacacagga aaggatcagg tccagaatga tgatatacgt 300  
 gacagagttt gggtagcact gattgaagag aggcttgtct aacatcgtct gagatggttt 360  
 tgggcatatt cagcgcagac cccaaaagct 390

<210> 5685  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H1

<400> 5685

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 aagaccccc tggcaagcgc catgccgggg acgactacaa cgccatggca agacccttgc 120  
 cgggcccccg gcaagaccct tgccgaaggc atcagcgggg ccaactgccag gcccgcgcca 180  
 gccaaaggctc cgccaccgtt cgcatacagc taccagccca accagctggg caggcacctg 240  
 cgtggcaaca tgcggcttac aagccaactc accaagcacc tacgtggtgg catgcagatc 300  
 ttcgtgaagg ccctgccatc gcgccacctc agcagcctgc ctgcctacat ggcactgcac 360  
 acatcgtctg cctgggcgcg tgtcgaagcg aggcggagcg gcgacggatg ggacgggcct 420  
 cgttcccatc cccgataaag ctaatggaca cctaagtagc gcattt 466

<210> 5686  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-030-Q1-E1-H3

<400> 5686

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ccgacccagc cgcgcgggat gcgatattaa ccatgtacac aaaatgttac ctccccaaaa 180  
aaatgtacac aaaatgttaa aattgaccat gtacacaaaa aatgttgatt ctcaaaaaaa 240  
aaaagttaag aatgtattat aaaaatatat tacatatata ccaaattta caatgtgtat 300  
aaaaaaagta aacataaaaa actaagtttt aaaaatcatt tatttcagaa atatttagca 360  
tttgataaaa aatgattcta atgtatatga aaagtgttga atactctctc catccggaat 420  
tgcnttgtcc agaaatggat aata 444

<210> 5687  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H7

<400> 5687

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ggtccgggat ctcccggtgcc tcatcagcag ctccgggcagc agcagctgct tgcagctgga 120  
aggacacaat tcataacacg gtgaggaagt ttaaagaagg atcatttgtt gccctcaact 180  
gtgtcatact gcggtaggtg tagtctacgc tgtgtagcaa cagggtttgg tagtctgtac 240  
tgtacgcgtg tagcgtgtta tgtagcggca atggcgaaca ggaagtgtag tgatcgtcgt 300  
gcaggcatga cggtgcaggc acgatgtcgt gcctgtgacg aaacggtgtc atggaggtcc 360  
ctgagaggat gtcatgacaa taatctgttg tcatgaaggt ctgcggtgcc tggctgcaaa 420  
tgtatcgaaa actcgaactc ct 442

<210> 5688  
<211> 445  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H8

<400> 5688

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accatcagca aggtcactag cctctagagc ccattgggat gaagactttg ggaccggagt 180  
ctcctggggc aaaggctcgg cgccccgagc ctcgtcggtc cgaggctcgt ggaccggagt 240  
ccgagacagg tccatgtcag acgggtccac ctcagacgga gcagtcctgt ggtcgggaga 300  
atcatctggg ggtggcggca aggaagggtgc accagccttc ctacctctcc cgctgccatg 360  
tccaccteta gcacctctct tcgtcttccc tcgaccttcc ctagccgaac aagaaacgcc 420  
caacggtggt gtctgcatac tgtct 445

<210> 5689

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H9

<400> 5689

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gagggcaaca tcctcatcga gaggttccat ggcgtccccg cggaggagcg gctgcactgg 120  
cgctccttcc tcgtcaagct cggcgccgag aacctcaagg gcgccaagtc cgaggagctc 180  
ctcgtcgctt cacacaagtc ggtctccatt gtgtatacca tgatcgggga cgtctgcctg 240  
tacattggtg gcaaggatta atatgatgag cttgctttgt tggaggatgat cttcgctgtt 300  
acgtcagcgg ttaaggatgt gtgtgccata acacctaccg agcgctcgt cct 353

<210> 5690

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-A1

<400> 5690

gggtcgacgg ggatcagcac ctcgccgtcg gaggagaaca tgcgtactt caatgtcatg 60

gtccttggcc ccgcgcagtc gccctacgaa ggtggagtct tcaagcttga acttttctta 120  
 cccgaggaat atccgatggc tgctcctaaa gttaggtttc tcacaaaaat ataccatccc 180  
 aacattgaca agcttggtag aatatgcctc gacatcctaa aggacaagtg gagtccagct 240  
 cttcagatac gcactgttct tcttagcatt caggcactgc tgagcgcccc aaaccagat 300  
 gatccccctc cagaaaacgt cgcaaaacac tggaaatcca atgaagctga agctgttgag 360  
 acagcgaagg aatggactcg tatg 384

<210> 5691  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-A12

<400> 5691

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 ttggaaaatc acgatcccga aggtttcatt ccgcttggac tccgtttgat attctgcaaa 120  
 aaatagcaat tctgggctgg gcctccggtt aatcggttag tcccaaaagt aatataaaag 180  
 tggaataaa agcctaatat agtccaaaac agtaggtaaa gtagcatgga gcaatcaaaa 240  
 attatagata cgttggagac gtatcaggca tccccaagct taattcctgc tcgtcctcga 300  
 gtaggtaa at gataaaaaag aatttttgat gcagagtgat actttggcat aatttgaatg 360  
 taaatcttct taattgtgat atgaatattt 390

<210> 5692  
 <211> 174  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-A5

<400> 5692

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 tcgggtagat tcatctcaca ggacggtgtc ttacaccatg accactggga aaattctgag 120  
 gatactcagg ttcatgtcct thtagaccat ggacgtatcg acaccgtgt tttt 174

<210> 5693

<211> 383  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-B5  
  
 <400> 5693

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gggtcgacgg ggtgccaaat agaaccgttg ggaagacttg gggaaagtct ttttgatcct   60
gctgtaaaaa acagaaactt tagtgctcgc gagaattgat gccatTTTTT tattggagag  120
ttctattttac ttaattcttt ttgcatatga ttaatagata aattcctcgc gtccagaaat  180
ttatttttaga atttttggag ttccataagt attataaacc tacatattac tacagactgt  240
tctgtttttg acagatactg tttttcgtgt gttgtttgct tattttgatg aatctatcac  300
tagtaacaga gtttataaat catagagaag ttggaataca gtaggtttta caccaatata  360
aataaagaat gagttcatta cag                                           383
  
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<210> 5694  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-B6  
  
 <400> 5694

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atggatccca gggacccttt cagaatagag atgacggaca tgctgatcga taagctgtat  120
aatatgggtg taattccaac aaagaagagc ttggttaaatt gtgagaaact ttcagtgagc  180
gccttcgcca ggcggagact tgcaacaatt atggtgaagc tcaagtttgc tgaacacctt  240
aaagaggctg tcacctacat tgaacagggc catgtgcgtg taggccaga gacggtcacc  300
gatcctgcct tccttgtagc caggaacatg gaggacttca tcacctgggt ggattcctca  360
aagatcaaga agaagatcat ggagtataat ggtgcattgg atgattatga tgccatga   418
  
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<210> 5695  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-B8

<400> 5695

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agatgacact gttgttgagg tacttgacgt gccagtagt gatgatgagg aggatggcat 180  
cgatgaggat gatgatgatg atgaggagga ggttgaggat gatggtgatg gtgaggaggc 240  
tgagccagag agtagtgga gggttgctat ggcggtggg ggtgttgag aagagattga 300  
tgacatgag caaggtgaag gtgatgatga ggatgagaat ggtgagatcg gagaggaaga 360  
tgaggaaaga ttgaggata gtanggttta tgaggaggac aacgatgatg acgatgctga 420  
tgatgaggat gaaga 435

<210> 5696

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-C10

<400> 5696

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cgatcgattg gccgatctgt tggtttcttg cgtccttcaa ttggttgtgt acatatagtt 120  
ttaacgtctg attcaggggtt ggcaccgcca tgtagaccat cgatcgtttt agatctctac 180  
ttattgattg attctttctt caaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 240  
aaaaaaaaa aaaaaaaaa aaaaaataa ataaaaaaaa aaaaaaaaa aaaaaaaaa 300  
aaaaaaaaa aaaaaaaac aataaaaaa aaaaaaaaa aaaaaaaat gggcccccca 360  
aaaggttcca ggcctaa 377

<210> 5697

<211> 418

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-031-Q1-E1-C12

<400> 5697

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cgcgccgctc gcgctcgggg tcgcttccgc tgctcgatct gctcccgaag ctgcgtctgg 180  
agctccacat gcggccccac atggtggctg gaggcggaag gtggtcgccg gcggcgagaa 240  
atgtggagaa ggggtggga attgcgtggc tcggcggcag cgggggatag ggtttcgacc 300  
cgcaaacgcg tcgtggaaca gtagatatag tggtcggggc gtgcggtttg cgggccgagg 360  
caaattttgt tacgggccgg acgagtatgt gggctctgtt ctgancgaaa aattgggt 418

<210> 5698  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-031-Q1-E1-C8  
<400> 5698

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cccggtgggc atattttcat cagggagtcc tgcttccacc agtctgggga ttccaagagg 120  
aaagtgaacc cgacgcacta cggggagcca aggttttaca ccaaggtgtt taaggaatgc 180  
cactcctatg accaagatgg gaattccttt gagctttctc tggttaacttc caagtgcatt 240  
ggagcttatg tgaagagcaa gaagaaccag aaccagatat gttggctatg ggagaaggtc 300  
aagtgcacag aagacaaagg ctttcagaga ttcctggaca atgtgcagta caaatccact 360  
ggaatcctgc gttatgagcg cgtgtttggg gagggttatg tcagcaccgg tggattcgag 420  
aacacaanaa gattttgtgg acaacct 447

<210> 5699  
<211> 350  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-D10  
<400> 5699

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gacgtgtggt atatattggt gagtgacatg atatgatatg atacaatgca gctcaggata 180  
 tcagcgtgtg gtttatttca acttctatgt gaggttctct ctattttag cagttagatt 240  
 agcacgtgta ctcttttttg attaaatcat ttttgatgta catttctttt ccattttttc 300  
 tatatgatat ggtaggacat attctacaca aggatctacc ttgcattttc 350

<210> 5700  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-D11  
 <400> 5700

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 tagaggagac ggtcatggag gagaccatcc gcgtgacacg cgccaagcta aggaggcgtg 120  
 ccgccgccga ggcgggcgcg tgaagcctag ctgcaaacca ttgttttatt ggcgcattgt 180  
 gttgttgctc ctattttttg agtctttttt agattgtcat gttgtctggt ggagagaata 240  
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 tcctgtggct ctgctggcc tgtttatgtg cctggaagtt gtaaatatca ccgggcatgt 360  
 gtatatacag attgttgga tgtgctacga cctacgaatg catctatcct actgctctc 419

<210> 5701  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-D12  
 <400> 5701

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 ttaagatgta aattagatga tcctgtgatg ggtttgatgt gaaggttggt tgtgtgcttc 180  
 agttcaaaca catctttgga tgatcctggt atcttggtgc ttatttattg tttaaatcac 240  
 acagttcaat ctttgtgttc tctgtaatat gggagaaggc gtggaacaga ggaagcgtgc 300  
 cacgtgaatg gatccagaac cgtgtactgc tacaaacggt gaagggtactc tcttctcttc 360



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409

<210> 5702

<211> 346

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-E8

<400> 5702

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gtctgcatgg atatgtacgc atattgtgta tcccatgtgt cgtgtcagac aactgatca 180  
taagcggcac gttgggtcag atacttcgat ctgccgttcc ctttgagtgt gacaggatct 240  
tcctgtgtcc tcgagacttg catagagatg catatgcagt aacgtgacgt gcaatcaccg 300  
acttagagta gtgtcagtct gttatcattg catacctgcc taaatc 346

<210> 5703

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-F1

<400> 5703

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taacgccaac ataaataaag aatgagttca ttacagtacc ttatgtggtg gttttgcttt 180  
ctttcactaa cggagcttat gagatttctt gttgagtttt gtgttggtgaa gtttacaagc 240  
tttgggtaaa gatttgatgg actatggaat aaggagtggc aaaagtctaa gcttggggat 300  
gcccattgga cccaagata ttcaagaata gccaaaagcc taagcttggg gatgccccca 360  
gaaggcatcc cctctttcgt ctttgttcat tggttaactc acttgagct atatttttaa 420  
tcgccacatg 430

<210> 5704

<211> 446

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-F7  
 <400> 5704

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 ggagcctcca attgagttgt ggagattgcc ccaacctcgt ttgtaaagggt tcggtcgccg 180  
 cctccaaggg caccaatagt ggaatcacgg catctcgcat tgtgtgaggg cgtgaggaga 240  
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 cgtacttcct ctcaaaggga aggaacttcg gcaacacatc ctcatctcca acgcctccac 360  
 tcttgggtgt ctggtgcctt tacttgtgga agcttatttg tttcatatat cttgcttgct 420  
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<210> 5705  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-F9  
 <400> 5705

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 tcatcgccag gacgaccggg cttcatgtaa gaccgtatca taattgccac accagtgaat 180  
 gatcatcgtc taactcccat tacacttctg tgatcacctc tcctctacta gcaccgcagc 240  
 agcagcagca agggatggag taccgaacgc agcacgaagg cagcgtctac tcggacctca 300  
 tggagacgtt cttggagtaa caacgcaacg catgcatgca tgcgtcgatc gatcatcctc 360  
 actacgacat gcgtaccgac tttatgtttt cttgttccca ctttttgttt tgttccaacc 420  
 aa 422

<210> 5706  
 <211> 394  
 <212> DNA

<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB104-031-Q1-E1-G5

<400>      5706

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agcattctac cattttcttc ggagagaagt agccagaaac agcagcgcca tggccggcat 180
catgcacaag atcgaggaga agctccacat ggggtggcggc agcgacgagc acaagaagga 240
cgaggagcac aagaaggcgg aggagcacia gaagaaggac ggggagcaca agaaggacgg 300
cgagcacaag gagggcatga tggagaagat caaggacaag atcagcggcg acggccacgg 360
cgacggcaag aaggacggcg agcacangga gaag 394
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<210>      5707

<211>      412

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-031-Q1-E1-G9

<400>      5707

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ccaagaccgt catcgacgtg cactactatg tgttgttcaa tagcatgttt gatactttca 180
ccgtgcagca gaatatcgat ttcataaga ccaactactc aagcgtcttt agcactgtca 240
cgaagcagaa cggtcctctc acctttgtag gtgaatgggt ggctgagtgg caggtgcccc 300
atgcaacgaa ggaagagctc caaatgttag caaatgcaca aatggatgtg tatgggaagg 360
caacgtttgg atgggcttat tggactctca agaatgtaaa caaccactgg ag 412
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<210>      5708

<211>      373

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-031-Q1-E1-H10

<400>      5708



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cacgtactcg tctccccggt ctacccaaaa taagaacaca agcaaggaac cacaataaat 360  
cacggtgcaa tgcacaggca tcatgatgca aaacatgtca tgatatgcga gaggtgatat 420  
gc 422

<210> 5711  
<211> 458  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-A1

<400> 5711

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ttatgatact cttactattc tgaatgggaa gaattttgct tgtagatcat gaaaagaatg 180  
ctttaggtgc tgggttatatt attgaattca ttcgatgatgc tacttaaaat tattatgagt 240  
gaggaatata tgcttgtagg aattgcaata atatcaagtt ccttccccac gtgcttaaaa 300  
tcttgaagct atgcttggtt taccttccca tgctagttga ttattgttcc cctaagttgt 360  
ttgctcacia aatccctatt cataggaagt gggtttaggt taaatgtgct agtcatatgc 420  
ttcatgatgc tcccggttatg tttcaattct taaccttt 458

<210> 5712  
<211> 434  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-A6

<400> 5712

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attgttgctc ggacaacttc tcgggcgagg aatgcaacgc aaagagccaa atcgggtgggg 120  
tgtttgacgc tcttcgtgct actgatgacc tgttgatgag gagggcatat tttaggaagc 180

agcagcttga caacaaaaca acatcaccta actctaactg aagaggacag ccggtgtgat 240  
 ttgctcttac attgatatcg catgcgtatg aataatggtc caatggaatt gggagcggag 300  
 taagaagctc atgttgcctt tatgcatgta ataatcatgc ctgcctgcat ggcccgctag 360  
 ctgttgggcc aatgcctggc tgccctgctg aactggcgtc aatttccagt ttgtttttgt 420  
 aatatataat aact 434

<210> 5713  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-A8  
 <400> 5713

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 tcgccagcgc cgctgcctcc gtgggcgtag tcaccaagga ggatgacagt atcatctcgg 180  
 ccgatgctcc ggcgatagag aaggaccaga tcgacacgtt cgtgcctgca ccggcagtca 240  
 aggccaacga ggatgccggt gccaccttcc tggctgcccc ggtggccggt gatgatgcca 300  
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 ctccgttggt ccgggacatt 380

<210> 5714  
 <211> 199  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-B10  
 <400> 5714

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 aaaaaaaaaa aaaaaaaaaa aaaaaaagga aaaaaaaaaa aaaaaaaaaa aaaaaaaagc 120  
 ggccgctcaa aaggatccaa gctaacgtac gcgtgaatgc aacgtcaaag cccttcaaaa 180  
 gggtcaccaa aattcaatt 199

<210> 5715

<211> 396  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-C10

<400> 5715

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ccccgtgcc acgaacgatg ctgaggtggg atcccaggaa gggatccacc atgaggagga  120
ggccccggag gtgtcacagg acaaactccc ggactttgca ctggactcag ccccgagacc  180
cacagtggct ccggagtcg gtgggcgacc ccttcgtaag aagggaaga cctgacgcc   240
ggctgcctcc atccaaccg aggtgcgga taatttgcta gaggcgtca acggtgcctc   300
catcaaagag gaacaccgca ctgttatgag tgcggtgatt cagaaggttc agctcgccaa   360
gagcaagctg accgaagcct gcagcagcct tctaac                               396
  
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<210> 5716  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-C8

<400> 5716

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tacacacatt gctcagggtt tcctaatttg gtaggatttt tggagttaca gaagtattcg  180
agagttacaa attactacag actattctgt ttttgacata ttctgttttc tatgtgttgt  240
ttgcttactt tgatgaatcc gtgagtagta tcggagggta tgaaccatag agaagttgga  300
atacagtaga tattacagca atatagaaga tcaatgagtt cacaacagta ccaaccgtgg  360
tgatttattt tctt                               374
  
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<210> 5717  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-032-Q1-E1-D3

<400> 5717

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aaaaaaatta aaataaaatc ttaagatggt gtgccgaccc atctcgaagg tgctcatagg 180  
gtaaaaaaaa atatattatc atactactcc ctctcgttcc aaatatttgt ctttctaaag 240  
atttcaacaa atgattattc cctccgttcc gaaataacttg tctttctagg catttcaa 300  
gggcacaaca tacggatgta tgtagacatt tagagtatag attcactcat tttgctttgt 360  
atgtagtcac ttgttgaaat ctctagaaag acanatatct gggaacggag ggagtacatg 420  
taaagcaaaa tgagtgaatg tataactctaa aa 452

<210> 5718

<211> 328

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-D5

<400> 5718

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aaactcacag ctccgaataa aacttgacca agagttgtaa atactccaag ttgctagctg 180  
tgatgcatga acgctacgtg gtagtcgac caatgacctg gttcagcggg actctgatcg 240  
gctatgacat ccgcggccgg cccgtcttga cagccatcac tccacgccat cgatggtgtc 300  
atgcacatcc gatacaaagg agtgatac 328

<210> 5719

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-032-Q1-E1-D6

<400> 5719

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ggtgacggct tcacgactt cagcgagttc atctccttct gcaacgcca cccggggctc 120  
 atgaaggacg tcgccaaggt cttctgaatc agttcatttc acctcagccg tccgatccag 180  
 gagccgatcc atctacgtac ggcttcgtat atcaatttca tgcaactacc tactccggtc 240  
 ccgatccagc ctcagcttca cctgaggccg gccctaattt tgtttgatca atttttttgc 300  
 tactagtagt aactagtgat gatcactggt gcaccattta tttattttat atcgtcacaa 360  
 ctttccagtg tttcttttct ttctctacct ttttgtcgat cgtcggctcc agctcgatcg 420  
 aacgatccat gctgctaatt gtntgtg 447

<210> 5720  
 <211> 352  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-D7  
 <400> 5720

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 cattctttca tgctaatcgt atcacacgct tagggagcgc ataagctaac tgggctcaag 180  
 tatctcccaa tcagcataat taacgcccac cgcccttttg aaattaggac ttaactactc 240  
 atgccatatg catgcatttt gatagacagt gtttattgat ctctctctca ctcaactctc 300  
 ctctctctct cactctataa ttagctcaca tcgtcataga attgacatgt tt 352

<210> 5721  
 <211> 335  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-D8  
 <400> 5721

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 agacctcgat gatgacagcc ctctcgggc ggagcttcgg aacaggccct aagacgggat 120  
 ctctgggata cagaacgttg cagtgggtga attacatttg tggctccata tctgttcggt 180  
 tgggggtacg taggtatata tcggaggaag aagtatgtcc gtggagctct gagggggcca 240

cgatgcaagg gggagcgccc gccatcctct tgaccgcctc ttttgttccc tgtcgtaagg 300  
tctacgtctc ctgcatgacg ttcagtgaga acatc 335

<210> 5722  
<211> 145  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E10  
  
<400> 5722

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agtcctgcgt ccacgagtct ggggactccg acacgaaagt gaacccgacg cactaccggg 120  
agccaaggtt ttacaccacg gtgtc 145

<210> 5723  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E11  
  
<400> 5723

gggtcgacgg gccggctgaa gcgagcgagc cgtccggtgg ctatttcggc tggctgcact 60  
gctgcatccc ggtctgggaa gtgatagtc tggccgtggc gagcatcgcg ggcttcctgg 120  
ccgggtttct tcttcatgat gcagtcgaca agatgagcaa caaggccaat ttatctgggt 180  
aagtttatct ggttacacta gtagtgaata gtgctctaga attatggttg tgggtgttag 240  
ctcagcatat atatatatat attgctgaaa gcatgtcgat cgatcgctg tcgtggcatg 300  
gcacgtactc ttctgccgga gttaagtacg tgtgagttcc tgtgtttggt tcatgtgcta 360  
cagcttaaatt tgcgtagcat gatttagtgt 390

<210> 5724  
<211> 65  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E5  
  
<400> 5724

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cttta 65

<210> 5725  
<211> 292  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E7  
  
<400> 5725

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catgattgca ttattatgca gacgagtatg aggaagttct ctgtaggaat tttatgtgga 120  
tgaagtgttc gactaatcaa aagagtctca atatgagaac aaggaagaaa agcatgaaga 180  
tcaagattgg gatgcacacg gcaaccaagg tgaatatgca gaggtactca agcatcaaga 240  
catggagatg aagaagaagg cgtcgactca tacgacgacg aataacaata ag 292

<210> 5726  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E8  
  
<400> 5726

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ttacgctctc caggctgtca cggcacacat ggttggtaaa atacaaacat ttgcgatttg 180  
caccataatc cgagacggtt cacagacagg aaacgtttgc aagcatgcac acagttgccg 240  
tttgcaaagc atgtgctatg tcagacaata tcacaaacgg tgcgggcaaa ctaaacgttt 300  
gtgttagttg ccttatcgta caggatcgc aaccatgaac tgtttctgat gaagtatgca 360  
tcgtaaacgt tgcaccacag aatagcgtgt 390

<210> 5727  
<211> 269  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-F10

<400> 5727

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agatgtcatc gtacttgtag tatggccaac ttcatgattt tcatacatgt cgctcttgat 180  
tcattgcatt gcccggtgaa tcgcccgatg cattcatata tagtcatatc ttgttctagc 240  
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<210> 5728

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-F4

<400> 5728

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tctttttctg acagtcaata attagatgca agggcctctt gctaggttta gttagactta 180  
atgcaagtgt ctcttacttt tatttcaagg ttggtgctat ttttcgaagc aaacttccaa 240  
gttctgcata ctaaatagtc tgatcaagta actaaagtgt cctaaatacg tagcaaagtg 300  
ggccagttcg cttctgtgac gatacaacac atcctggata ctagtaaata tcattagtgc 360  
cttctctttg tccagtttgt ggacttatag aatttgag 398

<210> 5729

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-F7

<400> 5729

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gccaccatat cacatgtctg ccagatggtg cttcaggacc ccttggccag gaaggatgac 180

ctgcgtcttc gtgccaaagg actgaaaact ttagggaaaa ttttccaggg tgттаagctc 240  
 aacagtgggtg agggggaagg gtcgcacatg aagaatatag ataacatgga tgacaatgcc 300  
 ggtagctccc ctgattcgtc accaaaacgg gagccatcat tcaatcccat tcctaaccct 360  
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 aac 423

<210> 5730  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-F8  
 <400> 5730

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 atggtgcttc aggagccctt ggccaagaag gatgacctgc gtcttcatgc cataggactg 180  
 aaaacttttag ggaaaatttt ccagggtggt aagctcaaca gtggtgaggg ggaagggctc 240  
 cacatgaaga atatagataa catggctgac aatgccggta gctccctga gtcgtcacca 300  
 gtacgggagc catcattcaa tccattcct aaccctctc ttactcagag tccatatgtg 360  
 gaggtcccc agtttggcgg aacct 385

<210> 5731  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-032-Q1-E1-G1  
 <400> 5731

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 ggaggaattc aaacatctgt gtgttctcca cttgagccat tgccaatcat tggaagaaca 180  
 tcatcttgag aatatagtga gggtgcccc gctaaggtag ctgaacctca aaaatacaga 240  
 aataaggaag ctcccagaac aaatcgggcg tttaggttgc ctgagttgt tggacctaa 300

acacacttgt gtagaggaat tgcctgcac tattgttaat ctcaaaaaat tgacgcatct 360  
tcttggtgac tatggtgtta aatttcctga tggaattgan gagatgcaag cattggagac 420  
attggaagag gtcagggttct ccaaaacaac a 451

<210> 5732  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-G2  
  
<400> 5732

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ccaacgaaca taacgagcat aacaacattc atcacactag tgagatcgct ggggttctcc 180  
gcgggcgccga tctgtgggac gaagaagaaa gagctagaca gaaacaggaa gacctgaaac 240  
attctcgctg tgctcaatca cgccctccaa ttgcctatgc ttctgtaacc ccattcccct 300  
tcttgctgt gcctgtgtac gtctctccag aagctcatga gttttgaaaa tcttgctnca 360  
gcagccaaag ctgcaatggt ttcattctcc ttcctttttg tctgttgta gaaaattctt 420  
ttccgctctt gacaggaaat ttac 445

<210> 5733  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-G7  
  
<400> 5733

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tcctggacgt tgggtgtaat actaccagag tggacaatgg caaagcgtac catgcataca 180  
caacggaaaa gaagccccgag cctgcgcatt gaccaagggt gtttacttgt agcacaaatc 240  
atgcaaacca gctcgggtgaa tttttgagct gatgcgtgct gttatgtctg ttttgctgat 300

gcacctagtt cctttgcaaa gctgtagtaa cttgttttgc tcgagggcaa tacaacagac 360  
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 acacaatatt gttaccccaa ccc 443

<210> 5734  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-G9  
 <400> 5734

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 ttgctgcgga tgggtatcgga agcggagcgc tcttgatggc aatgaagtac catgtcagta 180  
 tatcaaatag tcctttgtgg gattacatgc caatggtttt ctacatctga tcatctccga 240  
 aatttttgca ccgtacttca gccatgttat gccgcgtttc atcttttgct tgtaaagata 300  
 gtacatcaac cctttatgtg ggaaaagccg atagtgggta gatgctgtgt agaaaatagg 360  
 catacagga acctaacaac gacattttcc gcatcacggt ctattccttg cag 413

<210> 5735  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-H5  
 <400> 5735

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 tgtacataat acttattcag atctggacca atttcgaaat ttgcttatga ggacttaccc 180  
 gatttgttac atgttggttc cggcctcatt taaacttgct ttgatgtgtt gctctagtat 240  
 gtatcatatc ttgccatgag tagcgtaaaa tagcctttgt catgcatcat gcttggttgt 300  
 gcatcttgtc atgtttatgt gttgtgtgtt taccatgtgg tttgctcctt tccggttggt 360  
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<210> 5736  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A8

<400> 5736

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 atataattcc tcccaaatta ctaaaaccca caaattaatc actatataaa ccattgcaag 180  
 agctaatacta gcaatgagag atgaaaagac aaagttgcta acctttgtga acatttgaat 240  
 ggatgggggc cttcaaactt tgacaaaatt tgggcagaat gtgtgatgag ctcgaggaag 300  
 aaggaagaa cagagcacgg gtggacgaag ggtttatata ggacggcctt tagtaccggt 360  
 tcgacgcacg aaccggtact aaaggtgctg gaggggcccc agactgacaa catcctgcc 420  
 ccactctctt tagta 435

<210> 5737  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-B12

<400> 5737

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 gagttgcaag gcacttccgc gaagtgttct ctgaattggt gcaaggtggc cacggatact 180  
 tggttatgat gaagaaaaag gatggtgatg ctggcgatga tgacatggat gaggacgcgc 240  
 ctctggaagc agatcctgaa gggaggatag agaagtatat tgggtggaag gtcaaggttt 300  
 ccttcactgg caaggagaa actcagtcca tgaagcagtt gtctggagga cagaagacag 360  
 tgggtggcatt aacactgatc ttcgctatcc aacgatgtga cccagctccg ttctacctgt 420  
 ttgatgatgat tgatgctgct ctggatcctc agtaca 456

<210> 5738



<211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-B5  
 <400> 5738

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ggagcgggct gttgagtatt tatattctgg tattcctgag ccgatggaga ttctctgcacc 180
accaccaagt gcccagccag ctgatactgc cctggcttcg caagcagctc aacctgcagt 240
tgctcttcc ggtcctaata ctagccctt ggacctcttc cctcaagccc tgccaaatgc 300
ttcagcaaat gctgctggtg aaggaaatct ggatgttttg cgtaacaatg cacaattccg 360
aagcttactt tctttagtgc aggccaaccc tcaaatttta cagccattgc ttcaagagct 420
gggaaagcaa aacctcaga tt 442
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<210> 5739  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-033-Q1-E1-B8  
 <400> 5739

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aaattattag aatactctat gtgcttctact tatactcttt gagttatata gtttttgctc 180
tagtgcttca cttatatctt ttagaacaca tcggtggatt tgttttatag aaaccattgt 240
tctctcatgc ttcacttaga ttattttgag agtctacaa acagtatggt aatttgcttt 300
aattatttga ggcattcaag attaaataaa taaatttttc ttatgagtgt gttgaatact 360
atgagaagtt tgaaacttga taattgtttt gagatatgga gattgtgata ttagagtcgt 420
gctagttgag taattatgaa tttgagaaat 450
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<210> 5740  
 <211> 442

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C12  
 <400> 5740

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 gcaagcgctg cgccaagtac tatgaggctg gtgcccgtt cgccaagtgg cgtgcagtcc 180  
 tcaagatcgg cgccaccgag ccatcgcagc tctccatcga ccagaacgct cagggtctgg 240  
 ctgcgtatgc catcatctgc ctggagaatg gtctggtgcc cattgtggag cctgagatcc 300  
 ttgttgatgg acctcatgac attgaccgct gtgcttacgt caccgagatc gtccttgctg 360  
 cctgctataa ggccctcaac gaccagcatg tctcctcga gggcactctc ctgaagccca 420  
 acatgggtcac ccctggttct ga 442

<210> 5741  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C7  
 <400> 5741

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 gtccggaggt aaagaattat atatgggaag ttgagtttcg gccattcgga aagtttcggg 120  
 gttcaccggt actgtaccgg gaccaccgga aggggtcccgg ggggtccaccg ggtggggcca 180  
 cccatctcga agggccccgt gggctgaagt gggaggggaa ccagcccata gtgggctggt 240  
 gcacccccct ggtccccccc tctgcgccta gggttgggaa ccctagggga gggggcgcct 300  
 ccaattgcct tggggggcaa gtctcccccc ttggccggcg cccccctag gagatcccat 360  
 ctctagggc cggcgcccc ctgggggtccc tatataaaga ggggggttgg a 411

<210> 5742  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-D11

<400> 5742

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cacgatgttt acccagggtc gggeccctctc tatggaggta ataccctact tcctgcttga 180  
ttgatcttga tgaatatgag tattacaaga gttgatctac cacgagatcg taatggctaa 240  
accctagaag cctagcctgt atgactatgg taatgtgtat atcctttccg gactacaccc 300  
cccagtttat ataaacaccg ggaggatcta gggttacata gggtcgggta cataggaagg 360  
aatcttcata gttgatcgct aagcttgctt tccacgcaa ggagagtccc atccggacac 420  
gggtacagtc tt 432

<210> 5743

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-E4

<400> 5743

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ggacgtcgcc aaggtcttct gaatcagttc atttcacctc agccgtccga tccaggagcc 180  
gatccatcta cgtacggctt cgtatatcaa tttcatgcaa ctacctactc cgggtcccgat 240  
ccagcctcag cttcacctga ggccggccct aattttgttt gatcaatttt tttgctacta 300  
gtagtaacta gtgatgatca ctgttgacc atttatttat tttatatcgt cgaaaaaaaa 360  
aaagtcaaac gaaagaaaaa aagcggggcg tctagaggat tcaagcttac 410

<210> 5744

<211> 187

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F4

<400> 5744

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acatatgact gttcacaaaa taaagttgta caaaactaaa aaaacattcg ggtgctcgac 120  
atgatccaat cttatctatg cttgcatgca acattagctc gcttccacag tgtcacacat 180  
gataatt 187

<210> 5745  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-033-Q1-E1-F6  
<400> 5745

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aacgattggt gcaattattg atactaaaga aggaaatatt agattccaat ttccattaag 180  
gaagggcatg gaacactttc ctaggaagaa attaaattac cttatgaatc tattatgaga 240  
gccacttatg gattgcatac caaagatgat aatacctaga tctactcttg tttttatgcc 300  
tagctagggg cgtaaacga tagcgcttgt tgggaggcag cccaatttta tttttgcttc 360  
ttgttttttg tttccctttt agtaataaat aaatcatcta tcctctgtta tgattgtgtt 420  
tcttatgttt ta 432

<210> 5746  
<211> 440  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-033-Q1-E1-G10  
<400> 5746

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acaaggagtc cacgatccac ctgcgcgtgc gcctcgtcgg cggtggcaag ggcgggttct 180  
acccaccag gatggagcct aacctgcgca tgctcgcgt caagtacagg cagcacaggc 240  
ttgtgtgccg caagtgtat gcacgcctgc ccctcaggtc tgccaactgc cgcaagaaga 300  
agtgcggcca cagcaatgac atcaggccca aggagaagct gcgccccac tgaagcgttg 360

gaaacataac taggtgacat gcgatagctg gattaactgg gaattcaaag ttcgggttcga 420  
gtcttaattt cagttaaatg 440

<210> 5747  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-G12  
  
<400> 5747

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agccagagtg caaggttgaa tttgatatgg aggggaaagt gtgtggtggt acgtcagaaa 180  
gtgaaactgc taagtgaag aagggtgtct gtgatccttc ttacttggcc aacaaggtaa 240  
ggaagattgg aaaagttgca cgagcaattg ctattatgag ccaccaatt ccaaagcaa 300  
atgattccca ctcgattcag attatatttac cacaaaagca acttgggcgc aagtcagaca 360  
tgtatgtctt ctgttgctcg tacactcaca atgtcgcgcc aaaaggggaag ttcattgcat 420  
ttgtgtctgc tgaagcaga 439

<210> 5748  
<211> 196  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-033-Q1-E1-H7  
  
<400> 5748

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tacgtttacg cgttgcatga cgaacgttca tgagctccct tctgatagtg tcnnacctaa 120  
attcgaattc acntnnggcc gtcagtttta canacgtctg ctgactgagg aaaaannccc 180  
tggcggtttt acccaa 196

<210> 5749  
<211> 440  
<212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-034-Q1-E1-A10

<400>      5749

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ctggatggag gttcgtcgag cagatccggg tgaaaacctt gctctgggct agttgccaaag    180  
gccggcaatg gaaacgctct tttgtgtcgc ccccttcttg aaggcatcga catggagaag    240  
ctccaaacct ctatccgcta cctccaggga aaaccctaca ccagtcgatt ggatgatgtc    300  
ggcgtctctg tgtcgtcctc cctgggggca tcattcttgg aggtgtgcat tggctcgagg    360  
gaccagtgga cggtttcaat ggtgaagcag catttcatgt gacacatcaa cgacgtggag    420  
tcttggcggc atggtgctgc    440

<210>      5750

<211>      421

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-034-Q1-E1-A4

<400>      5750

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aacttagatc ttctcctcct aagcatgata tcaataagtc tctcaaagta atgggaattt    120  
ccattgatga gtgtaaggaa agaaccgcta gattgctgct taaaaaagat agctttataa    180  
aagcgtgttc ttctagtttc catgaaaata atgattagga tcttaaagtt attgatgcgt    240  
ctcttattag atctatgttt tgcaatatga attttgatga ttatgggact gatgatgaat    300  
caactttgcc tataaggcgt cccaagaatt cggagtcttt agattttgat gcgaaatttg    360  
gtaaaagtga gattggagaa gtcacaactt taaataatat tgaaccact agctcggaat    420  
t    421

<210>      5751

<211>      431

<212>      DNA

<213>      *Triticum aestivum*

<223> Clone ID: LIB104-034-Q1-E1-A6

<400> 5751

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actcacacaa ttgggaattt attagaatac tctatgtgct tcacttatat cttttgagtt 120  
atatagtttt tgctctagtg cttcacttat atcttttaga gcatggtggt ggttttgttt 180  
tatagaaact attgttctct catgcttcgc ttatattatt ttgagagtct tttagaacaa 240  
catggcaata ataaaaactt tcatacaagt gcattgaata ctatgagaag tttgatactt 300  
gataattgtt ttgagatatg gagatggtaa tatcagagtc atgctagtgt agtagttgtg 360  
aatttgagaa atacttgtgt taaagtttgt gattcccgta gcatgcacgt atggtgaacc 420  
gttatgtgat g 431

<210> 5752

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-A7

<400> 5752

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gtgatcagcc aaccagcagc ttgctggatc cttctctctg gatgcctaaa atcagtatgt 120  
ccatgtaatg taaacatccc tttccctttc cctttcttc atgtagcttc ggtctactcc 180  
ttagtagtcc tggtaaaagc ttgtgctctg tagttgcttc agctactggt accctatgat 240  
gtgtgtggtg taatatatta tggatcattg tggcattcct ttttcaatca atctgcctgt 300  
tgccgcgagt ctgaagatga tcgctgtgtt tgttctctca aatcctgacg aacttgattg 360  
ctgaaaaaaa aaaaataaaa aaaaaaaaaa aagcggccgc tctaaaggat ccaagct 417

<210> 5753

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-A9

<400> 5753

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 aaaagatgca aataaagaaa aaggcaaata gcaatataga tctgcaaata tatgatggga 180  
 aaatagaccc gggagccgta gatttcacta gtggcttctc tcaagaaata gcatatgatg 240  
 ggtaaacata ttactgttgg gcaattgata aaacatcgag taattatgcc gatatccaga 300  
 caatgatcat tatataggca tcatgttcaa gattagtaga ctgactcctg cctgcatcta 360  
 ctactattac tccacacatc gaccgctatc cagcatgcat ctagtgtatt aagttcatgg 420  
 aaaacataat aatgcaataa gaatgatgac a 451

<210> 5754  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-034-Q1-E1-B12  
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 tcgactcacc agtcgaagtg atgactggct caccaagtga aatgatgaat gtaaattctat 180  
 cctgcactgc aagt ttaact gtctatcctg cactgcatct ttaactggcc agttgtatga 240  
 ttcttggtt gtcttgtgtg agagcactct atatatgatg agggttctat gttcgggtgga 300  
 atctacttgt gatgagaatt taagttctgt gatggcatgt gagatgtaag agcactcata 360  
 tat tttatgtg gatcctatat ataaccgggt gatttatcta ttgtgttctg c 411

<210> 5755  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-B2  
 <400> 5755

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 ggtgacggct tcatcgactt cagcgagttc atctccttct gcaacgccaa cccggggctc 120



atgaaggacg tcgccaaggt cttctgaatc agttcatttc acctcagccg tccgttccag 180  
gagccgatcc atctacgtac ggcttcgtat atcaatttca tgcaactacc tactccggtc 240  
ccgatccagc ctacagttca cctgaggccg gccctaaatt tgtttgatca attcttttgc 300  
tactagtagt aactagtgat gatcactgtt gcatcattta tttatttatt ttatatatca 360  
tcacaagttt cctgtgattc ttttctttct ataccttttt gtcgatcgtc ggctccagct 420

<210> 5756  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-B5

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cgggggtcat gaaggacgtc gccaaaggtct tctgaatcag ttcatttcac ctacgccgtc 180  
cgatccagga gccgatccat ctacgtacgg ctctgtatat caatttcatg caactaccta 240  
ctccgggtccc gatccagcct cagcttcacc tgaggccggc cctaattttg tttgatcaat 300  
ttttttgcta ctagtagtaa ctagtgatga tcactgttgc accatttatt tattttatat 360  
cgtcacaact ttccagtgtt tcttttcttt ctctaccttt ttgtcgatcg tccgctccag 420  
ctcga 425

<210> 5757  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-B6

<400> 5757  
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actacatgcg tgaacatgtg ccaagtcaag ccacttgaat cattgaaagg aggataccac 180  
cctatcatat cacatcacia ccatttttaat agcatgttgg cacgcaagat aaaccattat 240

aagctcctag ctaattaagc atggcatgag caactataat ctctaattgt cattgtaaat 300  
atgttttcat ccgtaataag ttgaatcagg aacaatgaac taatcatttt tacaaaaaca 360  
agataggtcg agttcatacc agcttctctc atcttaatca tttcatcata tatcgtc 417

<210> 5758  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-C10  
<400> 5758

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cctaggtcgg ttagtTTTTT tttaaattat tccgctcgga agaaaaataa aaagaaatac 180  
taaacggact ccaaaaattc cgaaataaat tttcacgggc ttctaaaatc aagccgcaca 240  
aggtgaacat ttatttggga cctaaatgca atttcgaaaa acgcacattt ttcctaaatt 300  
caaataaaac accaaaaaaaa tcttatttga tttttattat taaatcctca atatttcttt 360  
atTTTgggaa agtcatttta ttccctctct catatttttg taatagaaat aattgatgat 420  
aaaataaata aaatgaaatg attctattct caaaa 455

<210> 5759  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-C5  
<400> 5759

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ttcgatcatg tcaaggaccg gccttgggat cggaatgttt aacacgggcc tgttcatagg 180  
tctacaggac aagctcgctg tgtgccggcc tggacttacg gcgttgggca tggcgatgag 240  
gttcgctcgt gtcccggcag ccaccgcggt cggagcgcta cttttgggac tgcgtggtga 300  
ccttttgcgt gttgccatct tacaggctgc actgcctcag tctgtcggag catttatctt 360

cgcgctagag tatgacctgc acgctgatgt actcagtacc gtggaatag tcggcacgct 420  
ggcttcgctg c 431

<210> 5760  
<211> 450  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-034-Q1-E1-C6  
  
<400> 5760

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tttgattgaa aagtatgatg ctactcttta caagtatgaa aattttgcca tagttaaata 180  
ttgctatgat aattatgctt ctaatgccta tggtaaacct tatatcaagg tctactccgc 240  
tgtccaagaa gagactaata ttttgcagga gtctatgcaa gaagaaattg atgagactgt 300  
gagctcattg gatgaaaaag atgatgagga gagcaaagaa cagaaggagg aagagcggat 360  
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cccttcgtgc ttatcgaagg attaatgcc 450

<210> 5761  
<211> 401  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-034-Q1-E1-C7  
  
<400> 5761

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accacgggct tcaacccccca tctaccgag taccgacaag agtaatggct gtgtgatatt 180  
ggacgcgcgt gcttatgtaa ctccctgtg ctgtgtgctc gtgctaaata ttggatatgat 240  
acgtagacgt actctactag ctgggactct cgagtgagtg agtttgctgc ctgtaaatta 300  
acaagtgtgt gtgtggctac ctgtgtactc ccatgtgggt gtagcacgta ctgtagtag 360  
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<210> 5762  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-C8  
  
 <400> 5762  
  
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 cagctaagca gcctgcagga gaggatcagg gagaggatga acgtgagga aggcacctcc 180  
 tacatgagga ggcgcgtgcg gcgcttcttc gaggccggca tgcggccaa gaggatgggc 240  
 ctgcgcgacg acgagcagat cgtcaagatg aggcctctcc ttaccaccag aatgacctcc 300  
 tcccctgcag atcaagatga tagtccgtag agagcaacga tgcatacata cataggatga 360  
 agattgatgt tggaattacc aaaattctta gtactacaca tacataca 408

<210> 5763  
 <211> 202  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-D1  
  
 <400> 5763  
  
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 ggggccagct caaaaggatc caatcttact taccctgaa agcaatgtca tagcccttca 180  
 atagggtcac caaaattcaa tt 202

<210> 5764  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-D10  
  
 <400> 5764  
  
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tttcgtctta agtgagttaa ccacatcaag tgttggtgcc tggacacaaa agagagagaa 120  
agagagagag agagagagag agagagagag agagagagag gccaacagaa acagagtggg 180  
gctctgatgg atacaacgct cgtgggtataa aaaggtgcct ggtccaatta aaagagtgca 240  
tccttatgat tgtgtaaggt ttggccaatg gaaaatgaat gttttggtgt catcatgatg 300  
atacagccat acaagaacac catgaggggt gttacatgca cgtttccaat tacaattgca 360  
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<210> 5765  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-034-Q1-E1-D11  
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aacgtgcttt tgcattgatt atttttgctg ctgatcaata aacaaatttt ccagtacttt 180  
atattttggt agaattttta gagttccata agtttgcggt agttacagat tgctacagac 240  
tgttctgttt ttgacagatt ctgtttttcg tgtgttgttt gcttatttca atgcatctat 300  
ggccaataaa ttagtttata aaccataagg aagttggaat acggtaggtt taacaccact 360  
ataaataaat aatgagttca ttacagtacc ttaaagtagt cctttgtttt ctttcactaa 420  
cggagctc 428

<210> 5766  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-D2  
<400> 5766

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agaaggcatc ccctctttcg tctacttcta tcggttaactt tacttggagc aatattttta 120  
 tttaccacat gatatgtgtt ttgcttggag cgtcttgat gatttgagtc tttgcttggt 180  
 agtttaccac aatcatcctt tctgtacaca ctttttgaga gagccataca tgatttggaa 240  
 tttttagaat actctatgtg ctctgcttat atcttttgag ttatataatt ttgctctagt 300  
 gcttcactta tatcttttag agcacggtgg tggatttggt ttataggaac tagtgatctc 360  
 tgatgcatca cttagattat ttgaaagcc ttaatagcat gggaattttc ttaaaatcct 420  
 aaata 425

<210> 5767  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-034-Q1-E1-D5  
 <400> 5767

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 catcgagtcc gactacttcg tggcgtacgg cgtcgtgttc aagaacgacg cgccactggc 120  
 caagccgggg gccaaagggcg ggcaggcggg ggcgctgcgt acgttcggca ccaagcaggc 180  
 cttctacaac tgcaccatcg acggcgggca ggacacgctg tacgaccaca aggggctgca 240  
 ctacttcaag gactgcgtga tcaaagggag cgtggacttc atcttcgggt ttgggaggtc 300  
 cttgtacgag aactgccgca tcgtgtccat cgtgaaggag atcgccgttc tcacggcgca 360  
 gcagcggacc aagaccatcg agggcgctat cgagagcggg ttctcattca agaactgcag 420  
 catcatgagc caaggcnagg ggg 443

<210> 5768  
 <211> 347  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-D6  
 <400> 5768

ttcccggggt cgacgggagc tccgtagcct cgctcctcgc gacgccgctg gacgggctgc 60  
 ccgcgcctc tggtcgctc tggctgcact gcctagacgc ccgatgggaa ctcttcttct 120

ctgtcacgtc gctcttctag gtctgtattc ttctctgttt ctctgttaac atctacgtga 180  
 atagattgat ggatagatgc atgtattgat gaacaaatgg tactgctaata gcattgatgt 240  
 agttacgggc ttttaatagc aaactagccc ccctatgata ctgtgtatta tactttactg 300  
 ctatgggtggg tacacttttc ctgtccgtaa gatcgggttaa ttacgat 347

<210> 5769  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-D8  
 <400> 5769

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 aacagtggaa agttgcatgg caatatatct cggaatggct atggaaatgc cataataggt 120  
 aggtatgggtg actgtcttga ggaaggtaaa taatgggttc aataccagcg aaagttgcac 180  
 ggtaataaga gaggcttgca aaatggaagg gtgagtgtgc gtatatccat ggactcacat 240  
 tagtcataaa gaactcatat acttattgca aaagtctact tagcccttga agcaaagtac 300  
 tacgatgcat gccccgagag ggatatatct gtaggaaaag accatcgctc gtccccgact 360  
 gccactcata aggaagacaa tcaaaagagc acctcatgga acaaatttgt cacacaactt 420  
 tta 423

<210> 5770  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-E5  
 <400> 5770

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 gactagatcg agcgacttgg gaggacagaa tcaagcgtgg ctacgaacac tggctcctca 120  
 tctcttgttt ttctccaaca tttcatagta ctcggttgat tgatatggca tccgtgaata 180  
 agtcttgaac aagctacacc tgaacagggg tttttataag ttcggcatca tggaattcct 240  
 tttgttctc atgcgaacct catttcatga aaggttcagt ctatctctctt tcttctcttt 300

ttgtaagtgg aaacgaaaca tggaaataga acgatcacat gattctgcag tgtatactct 360  
 cgtgtgataa aactaaaaga gatggtaaga tggttttaga atgacttggt caatacttat 420  
 cacacattta gctaac 436

<210> 5771  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-E6  
 <400> 5771

gtaccggtcc agaattcccg ggtcgacggg tgaggcccg acatccaagc tgggtgaagg 60  
 ctcaacacca aagtgaagca ataatgctgc atcgctcata gctactggaa gtaaattata 120  
 tcgataattt aagcatcagt gctagtataa gatgtctact tatgcacggg atgatgccac 180  
 tatatgatgg ccagtgttga agtacgaggg ccctatatga tgccctactga tgaagtatga 240  
 aaataggcta atgtgtatct atctgtagcc tcctgatcta agggagcacc gtatgtgtaa 300  
 tctctgaatg agtagaagac tattatagcg tcaactttga aaaaaaaaaa aaaaaaaaaa 360  
 aaaaaaaaaa aagaaaaaaaa aaaagga 387

<210> 5772  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-F10  
 <400> 5772

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 aattgacgat gggctggaaa ctgtcaaata tagaattggc ctttgatggg ccaattctat 120  
 gtaacttgta tgggcatgct ttgtaaatgg gcttgactca agtaggcccgc taatgggcag 180  
 gcccgcttat tttgatagtc ccggcctttt aacctgaatg ggccactggt gggctgagac 240  
 atgtgtcaac gtatcatagg cgtgttccgt ccattcgctg gatgacaact gtccgaacgc 300  
 cgagccgaca catggatctg ccggacaatg agaattttac acatggaaaa tccccattgg 360  
 tctacgctgt taacgggtta tcggatccaa accggaaccc gatagcttaa tggcgaccag 420



ttacggtgga tg

432

<210> 5773  
<211> 381  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-034-Q1-E1-F3  
  
<400> 5773

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taccggtctc atgtagtttt tgctttgttt ggtatgttcg ttgtcgggtcc ctcaaaaaa 120  
aacaatagtg agtgtacatg gatttgaacc atgggttgca ggactcatga accaactcat 180  
ccaaccaaag attctgcaga aagagaggga gcttaaaccg tctcgccata tacgtggcat 240  
tcattttacgt tttggaaaca tccatcatgt acgattcgtt ttttcaaacc tcctccctat 300  
atgtatgttg tggaccacag ttgcgggcgt gttgcgcaa ggggttgagc tccagcgaa 360  
ggagcgggag atggggctac t 381

<210> 5774  
<211> 405  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-034-Q1-E1-F6  
  
<400> 5774

ggtccagaat tcccgggtcg acggggagca caagaaggcg gaggagcaca agaagaagga 60  
cggggagcac aagaaggacg gcgagcaca ggagggcatg atggagaaga tcaaggacaa 120  
gatcagcggc gacggccacg gcgacggcaa gaaggacggc gaccacaagg agaagaagga 180  
caagaagaag aagaaggaca agaagcacgg cgagggccac aaggacgacg acggccacgg 240  
cagcagcagc agcgacagcg acagcgactg agccagctcc ggccgcgctc cggcagcagc 300  
gtgcagtgtg ggcgagatcg atgaacgctt gggagaagtg tggcatacat atatgttgca 360  
gggtttggag cgtgtggtag catatgtatg taatgcgtga catgt 405

<210> 5775  
<211> 420

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-F7  
 <400> 5775

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 acattgaata ctatgagaag ttgatactt gatgattggt ttgagatatg gagatgggtga 120  
 tattagagtc atgctagttg agtagttgtg aatttgagaa atacttgtgt taaagttttt 180  
 gattcccgta gcatccacgt atggtgaacc gttatgtgat gaagtcggag catgatttat 240  
 ttattaattg tcttccttat gagtggcggg cggggatgag cgatgggtatt ttcttaccaa 300  
 tctaccccc taggagcatg catgtagtac ttgtttcga taaataatag atttttgcaa 360  
 taagtatgtg agttctttat gactaatgtt gagtccatgg attatacaca ctctcacct 420

<210> 5776  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-034-Q1-E1-F9  
 <400> 5776

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 agattgtttg tggatgctcg gggaaacctg agcagcagaa tagcagatct tgccgttgcg 120  
 agtgcctgc gatggtgagg ttactaagag ctgcagacaa tggatggtac attgctgagc 180  
 atcgggcaag ccacaatcat tcgctatctc ttacatgcgg ggaaaagggt cactggccat 240  
 cccacaaaca cacagatgtg tacacaaagg atctcgtgaa acagcttagg gaaaacaatc 300  
 tgaacctcaa caaggtgtat agcatagttg ggagcttctt cggattaaca cagagcgtgc 360  
 cttttacaaa aaggtcattg cgcaatctgt gcgggagaat aagcagagac caagttgatg 420  
 atgatg 426

<210> 5777  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-034-Q1-E1-G5

<400> 5777

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gacgacgatg atgagaggaa gccacggcac aagaagcacg acgatgatga cgacgacgat 120  
ggcgagagga agccgcggta caagaaacgt gacgacgacg atgatgatga ggatgacagg 180  
aagccgcggtt acaagaagcg tgacgacgac gacgacgatg atagaaagcc acgttacaag 240  
aagcacgacg acgatgacga cgacgacgat gagaggaagc agcgtcgcgg gaacaaccgc 300  
cgccgccatg attacgatga ctgatcaagg catcctgaca tgagtttagc tgacgctaaa 360  
taagtatatg cgcggcgggt ttgcttcgat gaatcaccag ttcgtanttt tttt 414

<210> 5778  
<211> 391  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-G6

<400> 5778

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gggtgaatgt tagagctaatt cttgatattt gtattagcat gtttgagttt tgcagttagt 120  
caaatcaagt gtggtgttcg cccgacgaag gcttcagggtg agcgcgccaa ggaggtgaga 180  
tgccaggatg ccgtgtgagg cggcaagcac ggcgagatgc cgatggtgct gcgtgagaag 240  
cggcaagacg tatcaaaggc tggagccgtg atggactgca tcaaattggg tcgggtgaac 300  
cggccgggtcg ttctgtttgt tggactagct gttcatgcgt gagttcgttt actcctagct 360  
gagagtatcg ttgctaataa ttgatgcatg c 391

<210> 5779  
<211> 457  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-G7

<400> 5779

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tgttttttgt ttttgtttct gtttagtaat aaattttgca tctaacttct gtttagatgt 120  
 gtttttatgt tttaattagt gtttgtgcca agtagaacat ataggataac ctatgggtgat 180  
 agttaatttg attctactga aaaacagaaa ctttgcacgc acgaaattag ttttgttata 240  
 tcacataaac gtgcttttgc gttgattctt tttgctgctg atcaatagac aaattgtcca 300  
 ggacttacta ttttggtagg agtttttagag ttccaaaagt ttgcattagt tacagattgc 360  
 tacagactgt tctgtttttg acggattctg tttttcgtgt gttgtttgct tattttgatg 420  
 catctatggc tagtattaag tggatatgaac catagag 457

<210> 5780  
 <211> 339  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-G9  
 <400> 5780

cgggctttca gtttagagca gcaatctctg tacattttta ttgatattt cggttgattg 60  
 atcacacttg ctgatcaacg ccaatctgat ttgttctatg acctctgcat actttttacc 120  
 cctcagtaat tcaggccatt gtctcccatg taagaacgag atgcttacag taatgcccta 180  
 cagaaagtca gtgggcacat aatcttgggtg ctcacgtgtt ggataaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaataaaaaa aaaaaaaaaa aaaaaacaaa aaaaaaaaaa aataaaaaaa 300  
 aaaaaaaaaa agtaacacaaa aggttaaaaa ttaaattaa 339

<210> 5781  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-H5  
 <400> 5781

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 tcactctacg accgccagcc atcactgacg cagcagacca gtgtaccgtc atgtatcccg 120  
 tttagtgcac acctctcgac atctctgcag tccaccggat tcaccatctc taacacacgc 180  
 atccgcttac cttcactcaa cagccatcaa gcaaggcgtt taatatcata atctccacat 240

cccagccaat ctacctgggc gcacatttat cagaccatca tatcacattc tatgagacat 300  
tctatgagac caatcctcaa taccgacgat tctatgccta attctataat catatcagat 360  
cacacgccgt tcaagggttag tcttgtaatc agttgaatgc agtctccaag ac 412

<210> 5782  
<211> 465  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-H6  
<400> 5782

ggcgaaggat tcccgggtcg acgggttccc actcccaata atgggttggtg cttcaggtgt 60  
gaacaaccag ggcacgttgc taaggaatgc aaccagaacc agaatcaaat ggcccttcca 120  
gcaactggcc gtggaagcag tgggtggcagc ggcgtcgccg gtgcggggca gtggcggttag 180  
cggcggtgcg gggttcgaga cagggcggtt aggggttttat cccaggacgg gccggcggtt 240  
tataaagggt gagcctggag gagtccgggc ctagcacgac ccgtagggtcg gttcagttct 300  
tttgaaatag ttacgtcag aaaaaaaaaa gactactaaa cggacttcaa aaatcctgaa 360  
ataaattttc cccggcttcc aaaatcaagc cgcattaggat gaacatttaa ttggggccca 420  
aatgcaattt tgaaaaacat gcaattttcc caaattccaa ttaaa 465

<210> 5783  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-H7  
<400> 5783

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tccatgtatt tttagaagtt catccaatcg tcattttgat cagcgatcac gtcatactgc 120  
atatcctcta tcgaggtaga tgcttggatg gacacaatca gttgatctcc gcaccttagc 180  
agattcaagc aacaagtgtg tattgccatc aaattgactt tggagagatg gcatgctcgt 240  
ttaggccacc cttccttctt ccaggaccaa acacgttctt agtagaaata aactctctgt 300  
tggtggggag cataattctg agacgattta tgactcttgc cagatagcac aacaccatca 360

gttgcccttac cctgtttcaa ctaccaattc ggtgaagcca ttgtaactca taatttc 417

<210> 5784  
 <211> 310  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-A1  
 <400> 5784

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 attcgcaaaa tactagattc acaccataat cttttttaaa aggaggcact ataccctcgc 120  
 ctactcatcg ccccgacgag catgccgagg agaccaggag gcacacatcc aagggagtgg 180  
 gtgtgggcta gggttcatct tctgatattg ccaatcgtgt ctaccgcccg gtgaatgcca 240  
 atcagacgtg cgcgacaaac cttacttggg cctgcagcca gacattttga ctgcagcacc 300  
 gatttcacgc 310

<210> 5785  
 <211> 299  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-A10  
 <400> 5785

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 gcggactgag aaccgggtac tgaattgtca tgatttcaaa tttcggaagg gccttagctg 180  
 tcaaattgac ttgtctacaa ttccgcttcg cctgaagtca tctattaccg tccggaggga 240  
 gtactatcca atcacgtgat cacctaatat cattctttct ctagcggcgc actcaagcc 299

<210> 5786  
 <211> 171  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-A4

<400> 5786

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gcatggaaat cccccgttgc tcggtgagat tcaagcgtgt gtcgtaggga aaatacaatc 120  
cgttcgcgct atctagactc tacaattgtg caggatccaa cgcttgggggt c 171

<210> 5787

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-A8

<400> 5787

gggtcgcggtt gtccgttacg actccctata gtgagtcgta tcatggccac gacggtgacg 60  
gcgactcggtt cctggccacg acggtgacgg cgactcgctc ctggccgcga cggcgacgct 120  
ggccggcagt cgtgacctga ccgtgacggc gaaccgctca tctcctccg ctccgccaag 180  
aactgttaag agtgatttgg aggattcaag attctgtgaa gctcttttga catttaaagc 240  
tcagaactga ggttacattg tcataggttc aatatgacgc aaaatagggc taagtggaca 300  
gcaaggatat agaaagggtct cgtggaggta cttacagagt acaatctatc tcattaccgt 360  
ggtcaaaatg ggtggactac cgaaggatgg aatcaagttg tcaaggaact gaacagttta 420  
tatccagagg caagg 435

<210> 5788

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-B10

<400> 5788

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gttcgagggc atcggctacc acctcctcac ctctctctgc cacttgctcg tcatcttct 120  
caccgtcagc ttcgtctggt ccaacgctgc gtccttcac aacaggcttc ctccaaagtt 180  
ccctgaggtc attttatctg aaaccaatg cctgataata gctcatgttc tgaggaaaga 240  
aatcaatgag gctttcatca ccttgcaaag tgttgcttcc ggaaaagacc ttaaaacata 300

cctcaagtca attggagtcc tctgggtcat ttctataatt gggggctgct tcagcttctt 360  
gactctgtct tacactatatt tctgatggc atacacgctc cccatgctct atgagaaata 420  
tgaagatgaa gtcgatgttg 440

<210> 5789  
<211> 115  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-B11  
<400> 5789

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tccggtagga catcctcggc gtcttatgca acctccgctt cacgttcgct accgt 115

<210> 5790  
<211> 463  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-B12  
<400> 5790

ggtccagaat tcccgggtcg acgaggtcat caggcaaata ttttgatgtt cccctcgac 60  
gctgtctggc acccttcctt actaatttct ctgcagccat gaacttaaaa ctgaatggct 120  
tcaatatgtt caaaggcttc aagggtttt gcttgctggt caaacaggaa ctagcttcag 180  
gagagttaat gtgttactgt aagaattctg caaacaaatg cagactatga gaaccaaggg 240  
attcttccac ggacatgtac ctgtggcagc attaaagatg cgatggaagg gaagaggtca 300  
tatgcattct cagaagattt tgaagataaa tcagtttgaa gacattgacc tcatgttgcg 360  
aagacattca cttatgtgtt gagtgttggt tccagatttg tacgaatcaa tgaataagta 420  
caagtgagga atctaactat atgtgaagct taagtgaata tac 463

<210> 5791  
<211> 461  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-035-Q1-E1-B2



<400> 5791

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tggccgacgac ggcgacgctg gccggcagtc gtgacctgac cgtgacggcg aaccggtcat 180  
cctcctccgc tccgccaaga actgttaaga gtgatttggg ggattcaaga ttctgtgaag 240  
ctcttttgac atttaaagct cagaactgaa gttacattgt cataggttca atatgacgca 300  
aaataggggt aagtggacag caaggtatga gaaaggtctc gtggaggtac ttacagagta 360  
caatctatct cattaccgtg gtcaaaatgg gtggactacc gaaggatgga atcaagttgt 420  
caaggaactg aacaatttat atccagaggc aaggtttacc a 461

<210> 5792

<211> 213

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-B4

<400> 5792

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agcatgaatt gcgcgagaca ggaggctagc atggatatct ccctttgctc tggtatcttc 120  
acgcgtgtgt caaagggaga ataccactca atcgcgctat ccagaccgtt tatttgtaca 180  
ggatccaacg cctggcatca gaccggccaa aac 213

<210> 5793

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-B5

<400> 5793

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acgggacacc tccgcctcga tcaagtggta tcagatttcc aggttgctcg gtgagatttt 120  
acagtttttc gtagttttag tcgaatctgt tcttcatacc tacagtccac gagaaagccg 180  
caaaaaaac ttaggggttag ttcatcatat ccgaaccaat ctgagccttt gcataatctt 240

tttagggttt tgctttgttg aatttgcggt tgcacgctcg tgtctagttg ctgggtcttag 300  
 agtctagtct tttagagttt cgagttcttg tcataagttg tcatgccgcc gccgcaccat 360  
 catcatcgtc gctaccatct atcaccaccg c 391

<210> 5794  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-B7  
 <400> 5794

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 gctcggggcgg ctgctccgc tacacttccg gcgacgaaac agggtcagac aagctcattg 120  
 tggagagggg aaacgaggag agcaagcgggt gcggctggag atccccctac ggcagcgata 180  
 acgttcggcg gcgacggcgg tctgtggcgc tccccgcga gatcggtttt ttctaatacg 240  
 aggcgtgcgg cgagcggaag aatcggggaga aagggtgcgg cgttcctcgc ggagtcttgc 300  
 ccgtgtacgg tgtctctgag gagcatggga tcgaacatgg ggcagatca atctgggctc 360  
 cgctcggcct gttcgcgctg tgcgtccgtc cca 393

<210> 5795  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-B8  
 <400> 5795

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 accgtagttc tttttttttg gcaaaaacaa tgtgtattca actgacattg agtgggttttc 120  
 tctocaagaa aactgacaat gagtggtttt gcgacataga gtactcaacg aagcagtaca 180  
 gagctccatg ggagggatgc ggcacgtgaa attttgttca ctacgagtga ctttgtatgg 240  
 ccggagcatg gtctagtttg tgcacaaagc tttgtacca gcgatttagt tactaagttc 300  
 agtaattcat tgaatcaaca ttgcttgga tccagggact taatgctgtg aactcgtttc 360  
 ttccaaatga atcaacgtgg cttttttatt tatatgat 398

<210> 5796  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-B9

<400> 5796

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 atggcaaata atgtaatgcg ggagataggg attgtgatgg gtacttggtg tgttgacttt 180  
 tgcgcagacc ccccggcaac cccgcaaaaa atcctcctgg caactccgga aactgcctt 240  
 gggattcccc caagaagaaa agaagattcc aaaaagttac cttagttatt cccaagtgtt 300  
 ttgaaaacca aggtatcaat ccagtaggag gctacgcgcy agtccctcgt acctacacaa 360  
 aaacaataac tcaatgcaac caactgctt aaggattgtc aatccc 406

<210> 5797  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-C11

<400> 5797

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 tcattttcct ctccccagc tcacccttgc cgttttattc gccctctctt tcccgctcgt 120  
 ctccctcttt cgcttgctc ttgtatgctc gttgtcatgg ccagctcggc cttcatccct 180  
 tcgtctcccg acattgaagt ccttcacttc aagcatagac aaggagaaaa tttaaaagat 240  
 gcttggttta ggatgctaga atcttatcgt ggttgcaata tagaaggaga tttcaaaatt 300  
 ttacttcaca atttttacgt tggggtaacc atatccata gacaacttct tgattttgct 360  
 gccaaaggga gttttattga aattgatcct agcttcgctt atgaaattat aagggggata 420  
 gtaggagtag tccccctaca aaatgggtca accct 455

<210> 5798  
 <211> 480

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-C12  
 <400> 5798

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ccggcaggta ccggtccaga actcccgggt cgacgggagg atcgactaca gcgagttcgt 60
ggcgatgatg aggaaagggg cccccgaggg ggccaacccc aagaaacggc gcgacgtcat 120
gctataggag acggcggggt ggtggaggaa gccgcgggcc gatcggcgac agaacagcaa 180
gcgatcgagc gcgcgtacga ggccgctcgc aacgacgacg acgatgggct cgtgtacatt 240
tttcacagaa ggggtcgagt agcaaagtgt catatatata ccgtgggatt gggaatcgaa 300
aatgttcgta cgctgtcggg cgctcatctt cttcttctct ggttctgctg gttcccttga 360
cttgtagta tgtatacatc agttgagtaa gttggcattt tttagcctga atttgtacac 420
ggtttcaggc ttggaaatgt acaggtatgt aacttgagtg aactaacgag tgtgtttttg 480
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<210> 5799  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-C3  
 <400> 5799

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caaatctttt acccaaaact tgaaaacttc acaacacaaa acttaacaaa aaatctcgtg 120
agctccgtta gcgaaagaaa acaaaacacc atttcaaggt aatgtaatga actcactatt 180
tatttatatt tgtgttaaac ctactgtatt ccaacttctc tatggtttat aaactatttt 240
actagccata gattcatgaa aataagcaaa caacacacga aaaacggaat ctgtcaaaaa 300
cagaacaatc tgtagtaatc tgtaactaac gcaaacttct ggaactccaa aaattcagcc 360
aaaataggac aacctagaaa atttgtttat tgatcagcag caattggaat anatatttta 420
tcacgttctg gttattttta acaattat 448
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<210> 5800  
 <211> 455  
 <212> DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-035-Q1-E1-C4

<400>      5800

gtaccgcgtc agaattccag ggtcgacggg gtagcttttt cttgggattt gtttagtta 60  
aagtttagcca ttgcaacttc gtgtacttcg tttgtgtcca acgaccagac caagaccgct 120  
tctggatccc caccattatc aatacctcat atatatttgc aatattcaga ttgctttatc 180  
atattcttgc tcgttcttcg attgcttgca ggaatagacc ttcgtgggtca ggctgaccgt 240  
gcttccggcg tcgtcagtaa cctcaggaga ttggtttagc gattgttaag gcgcaacgct 300  
atgcacgttt gtagtcggat tgtcaaagtc gtctccacca aatcgatatt tatcatctca 360  
tcgaaagatc gggacaccct cgcctctatc aagtgggtatc agttttcagg ttgctcgggtg 420  
agaattttta gttttcgtag attagattta ttttc 455

<210>      5801

<211>      450

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-035-Q1-E1-C7

<400>      5801

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aaactttaca ttccatagtg ccaactggcg ctgccaagca agaggagctg tctgctagga 120  
ccccgttggt tcttctagcg atgcagttac tgcataacct agagaagaat tcatttagga 180  
gagtactgcc ccgctttttc ccgctgttga ttgatctgat tcgctgagag catagctctg 240  
gagatgttca acacgcgctg tataaaatct tcaaatcatc aataggcccc atgatagaag 300  
tataatggca cattcctgtc ctgttaggcg cacgattttg tgtcaacatt ctgacatcct 360  
gaatgagccc ttcaagatcc tggagttcaa gtgcatatta ctagtccaga tatcaggcat 420  
aaagaggaaa atacattttt gcttacatcc 450

<210>      5802

<211>      397

<212>      DNA

<213>      Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-C8

<400> 5802

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ggccccgcgg acccaaacac catcctccgc gtcttgtgcc accgcgacga cgaggccgcc 120  
aaccagttct tgaagcgcac gttccagctc gccaaagcggc ggtgatgtcg gccaaatgct 180  
cgaagaatga gtctaggtgc tactatactt ttttagtccc attactgcaa caacaacagt 240  
tgccggtacg tgggctgtat ctgtgccagc ccaagtgagc ggcctatgta atgcgttcag 300  
gtgtgagtgt gccttgtaa atagccgttg ctaaagcgtg agggttgagg atccatgtac 360  
tgccaagtgc caacttcct aaaaaaatg tactatc 397

<210> 5803

<211> 433

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-035-Q1-E1-C9

<400> 5803

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caaaaatatt cgaaacgttt ataaactaca ctctgggttt aaaagataaa atacattcaa 120  
acttggaat catatgaaaa aaaacatgag tgagtagaac atggcattga ctctgccaca 180  
aactagctat ggcaaaagct gtcagcattg atggaggaag tgcaaaatgg ggacgcatat 240  
gcatgtgtaa ccaagtctcg aactagatga acggctgcac catgcatggg atatcccggtg 300  
catgcagtgg cggatccagg gccagggccc aggcctgggg cgcggagaag atttccttcg 360  
tgtgtatatag cagtatgtgc actgtagctg tactgtagca gattgtanca gcctggggcc 420  
cggggctttg ccc 433

<210> 5804

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-D10

<400> 5804

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 ggttgcata gcaagtgatg gtgcgggtgt gttgttgctt acggagttgc tccccgatgaa 120  
 actgggcaac gggaaatcat gtaccgtctt gtctggattt tccttcgtcc agttgatgat 180  
 agctggaacg aagttagtag cgaaatcatt tctgcaggca gttacagctg cattgactgc 240  
 ctgctgtagc aactcatttt tctcctcggc tgtttttttc gcgtcctcgg ctgctttttt 300  
 ctgcaccgca agcttcacct tctcattgat gtccgcctga ctaaacttct ttttctgctt 360  
 cttggcctcc gggacctcgt tgtaaaacac cttccatgtg acgccgtctc cagcgccgtg 420  
 cacacgaccg tattgcggcc gctct 445

<210> 5805  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-D12  
 <400> 5805

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 ggcatagttg ccagatgagc tcggacccat gtgctccgaa gacaggagga gaattgtgca 120  
 ttgcacagtc actttaacat gcaactctta gttgatcaat ctccagttaa gcagcctaac 180  
 taggctgtag tgctaaaact gatcagacga ctgcaattcc tgctacgttc tccagtgtgt 240  
 ttcaagacat cttgagtttt atgtgaactt gtgtccactc tgatgtaacc ggaatgctgt 300  
 ttggcccgtg tgtaatatat ttcttcacct ggatctgctt gactcatcta tcatcaatgc 360  
 aaaaccggtg ttacgtatcc gaatactcgg tttgttcatt cgccacacgt ccctagcaga 420  
 actaaactgc aaactttccc ccac 444

<210> 5806  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-D4  
 <400> 5806

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 aggaaagtca tgggtcttggg tagacacgag cttgtcctta gtccctcatc gagacgagta 120  
 tgtccggtat ggcatggtga ggtttgatga gtggtgattt attccactag tggtaatat 180  
 gttggaggat acttggacca cctgactcgg tcgtangccg agtcttgatc agtaccttcc 240  
 ctatttgttg gtaccaccac ttgtccctgt cacagacagg gtatggttta gtaagttggt 300  
 aacccttac caaagcacac atcgtagaga gaggccatgg tggaagatac cggaggcctc 360  
 cggtaggcat gccacctggg ccggnngcat ggggtgtttcc ggtt 404

<210> 5807  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-D5

<400> 5807

ccggtctaga attcccgggc cgacgggtac ccaaagctct gaccacctca ggcaggtggt 60  
 ttccactcag atgggtttga gtgaccagga cattgttgct ctttctgggtg gtcacacct 120  
 gggaagatgc cacaaggaga ggtccggctt tgaggagacc tggactgcca accctttgat 180  
 cttcgacaac tcttacttca ctgagctcct ttgtggggag aaggaaggcc ttcttcagtt 240  
 gccgaccgac aagaccctcc tgactgaccc ggcttccgc ccacttgtgg acaaatatgc 300  
 tgcggatgag gatgctttct ttgctgacta cgctgaggca cacctcaagc tatccgaatt 360  
 gggatttggc gaggtgttg acggctgctg ctgattcaag ctgggcg 407

<210> 5808  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-D8

<400> 5808

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 tggagatccg caagaatttg gatgctatgg atgaaattga gaggcggagt gcggaggact 180



atgagaagtt ccgtaagaag ctaaacaata ttgagaaagc atgcaatggt gctttgatcg 240  
 tgctgggtgcc tagcactggt ctgcttttta tgtcactgta gtatcatctc tattagtgg 300  
 ttataagaaa cccttattta actagtgggt taagaaaccc taccttcaga actctatgtg 360  
 ttgtagtgat ccagctttgg actttgcatt gcactctcat gaacgcataa tggtagcag 420  
 actcgttata ag 432

<210> 5809  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-D9  
 <400> 5809

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 cggggcagtt ctacctcaga aatcaaccgt ccaacagtga catggacaca atgctacaaa 180  
 tgcaggctga caacgaccgt tatttcatga ctcccacgat agacggcggc ttcattcacg 240  
 ctccgggtccc ttgagtcgag tcgaaagtag tgatgctgtg tctagttctg aaacatcgat 300  
 tggctcatgt tgtaattaaa ctttaatgaa cttgtagtat gtctctttgg tttcgagagt 360  
 cgttcaactt agatgtaatc gatgctatta atgtcttgc tttctcttcc aatcattctg 420  
 ttgcatactt atatattgcc taagt 445

<210> 5810  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-E1  
 <400> 5810

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 ctcaagacgt agcaagaagg atttctggca ccattgtcgg ggaggtcttc gctcaagtca 120  
 agacattcca agtaccatc acaaactcat ctccctcgca ttacattat tttcatttg 180  
 cctctcggtt tctctcccc cacttcaccc ttgccgtttt attcgccctc tctttcccaa 240

tctcctcctc tcttttttgc ttgctttctt ccaacttgct tttgtttgct gttatgttgg 300  
aaattgggga aattatcgtc gatacgggca ataatgataa catggaaaat tctgaggctc 360  
cggctgaaga acccctatct tgcatactaa aaagtttcga atcggtagtg gtaacattat 420  
tggaaggat gttattcaag atttcattac ttgta 455

<210> 5811  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-E10  
<400> 5811

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acaaggaccg cctcgaccg gcgctgctgc ggccggggcg catggacatg cacatctaca 120  
tgggccactg ctgctgggag gcgttcaaga cggtggccgt aaattatcac ctgctggacg 180  
accatgctct gttcccagag atacaggaac tgcttgccgc ggtggaggtg aaggtgacgc 240  
cggccgaggt gtccgagatg ctgctgcgga gcgaagacgc cgacgttgcg ctacgggtgc 300  
tgacggagtt cctccaggac aagagaagca aggcaagaaa agaggcaaca gaaatcaaga 360  
tcggcgtagc agagaaggca atgtagcagt agtagtagta ttcagtgtca gtatcccctt 420  
caacgggacc gttttattgg aggag 445

<210> 5812  
<211> 465  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-035-Q1-E1-E11  
<400> 5812

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gggggagggt ggagctgaag cggatcgaga acaagatcaa ccgccaggtc accttcgcca 120  
agcgcaggaa cggcctgctc aagaaggcct acgagctctc cgtgctgtgc gacgccgagg 180  
tcgcgctcat cgtcttctcc aaccgeggca agctctacga gttctgcagc acccagagca 240

tgacgaagac actcgacaag tatcaaaaat gcagttatgc aggacctgaa actactgtgc 300  
agaaccgaga aaatgagcaa ctgaaaaaca gccgcaatga gtacctgaaa ctaaaggcac 360  
gggttgataa ttacagcga acacaaagga atttgcttgg tgaagatctt gattcattan 420  
gcataaaaga gctcgagagc cttgagaagc aactccaatc aacct 465

<210> 5813  
<211> 454  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-E12  
<400> 5813

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cggggagcac aagaaggacg gcgagcacia ggaggcatg atggagaaga tcaaggacaa 120  
gatcagcggc gacggccacg gcgacggcaa gaaggacggc gaccacaagg agaagaagga 180  
caagaagaag aagaaggacg agaagcacgg cgaggggccac aaggacgacg acggccacgg 240  
cagcagcagc agcgacagcg acagcgactg agccagctcc ggccgcgctc cggcagcagc 300  
gtgcagtgtg ggcgggatcg atgaacgctt gggagaagtg tggcatacat atatgttgca 360  
gggtttggag cgtgtggtag catatgtatg taatgcgtga catgtctcat ggatcctgtg 420  
atgtataata attaccggcg tgcactgcac tgca 454

<210> 5814  
<211> 449  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-E2  
<400> 5814

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ttatatacca aggtgaagca gatgacggcg ttcgggctgg ctgagctctg ctccgacgcc 120  
gacgagctcc tcgacaaggt gcgtgtcatc caggccgaca cgctgagcat gatccagggc 180  
ggcttcaccg gcgggagcac cacctccgag accagctgcg aggcgggtccg gctgtcgtgc 240  
gccacgcttg tggagcggct caagcccacg aaggagagca tcgagtcaa gtccggcgcc 300

cctgcgccat ggaaggcctt gattaccag gcgaccatgg cgagcgtgaa cctgtcggcg 360  
cagggctact ggacgcctga cccagccttc gtgaagtaca tcaactacgg acccgccgtc 420  
agcgagggtg aaatcgacgt gctgaccgg 449

<210> 5815  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-E5  
<400> 5815

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ttcaacacat tctgggaaaa ggatgttgca gagtctgtgc gccagggaga tgccgagcca 120  
tttgctgagg aagctgtgct gcaagtatct gattgggggtt tcagcttggtc agatattcaa 180  
atgcagaaga aagaggatca gggagtatct gaatttatga agtctctgtt cagtcaggct 240  
gaacgagagt ggggggggatt tctgggcca atccacattt ggcaggggaat ggatgaccgg 300  
gtggtgcccc cgtcggtgac cgagtttgcc aggaggatgg ttccaggagc cactgtccac 360  
aagcttctcg acgaaggcca cttctcatac 390

<210> 5816  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-E6  
<400> 5816

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atgaagtgtg cctggccttg gcatccttat gagtggcggc cggggacgag cgatggtatt 120  
ttctaccat tctatcccc taggagcatg cgcgtagtac ttgatttttg atgacttcta 180  
aagttttgca ataagtatat gagttctttt gactaatgtt gagtccatgg attatacaca 240  
cttttacctt tccgcctttg ctagecctta cggtagcgtg catttccctt tctcaccttg 300  
agagttgggt caagcttcgc cgggtgcatcc aaacccccgt gatacgatac gctctatcac 360  
acataaacct ccttatatct tctcaaaac agccaacagt acctacctat ccatggcatt 420

ttccatagcc attccgagat atattgccat gc

452

<210> 5817

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-E8

<400> 5817

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caataatgct gctgcaacaa tctcatcgat cttacaaaaa actagcaaaa gggctctgtgt 120  
gttacaacag cagaaaaaaaa atcataatct ccaaaggcca tagcaacatt ttgctgcaac 180  
accgataaca ttttcacgaa cattctgttc aattttatta acattttaat acacaaactt 240  
ttaaaaaaaaa tcatgaacat ggtttgattt ttcaaacatt tgttttcaaa tttgcaaaca 300  
ttttcttgat atggaagatt ttttataaaa ttataaacat ttttttaacc cacaaacatt 360  
ttatgattta ttgagcattt tacttaaaaa ttctcctttt aaattatttg aagttacaaa 420  
tttattaaag gagg 434

<210> 5818

<211> 462

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-035-Q1-E1-E9

<400> 5818

ggtccagaat tcccgggtcg acgggatgct ttatgttttc gtttctgttt agtaataaat 60  
ttttcatcta ctttctgttt agatgtgttt ttatgtttta attagtgttt gtgccaagta 120  
gaacctatag gataacctat ggtgatagtt aatttgattc tgctgaaaaa cagaaacttt 180  
ggcgacgaa attagttttt ttaaatcaca tatacctgat tttgtgttga ttctttttgc 240  
tgctgatcaa tagacaaagt ttccaggact tcctattttg gtaggatttt tagagttcca 300  
gaagtttgcg ttagttacag attgctacag actaatctgt ttttgacaga ttctgttttt 360  
cgtgtgttgt ttgcttattt tgatgcatct atggctatta ttaagtggta tgaaccatan 420  
agaacttggg atacagtagg tttagcacca aaattaatta ag 462

<210> 5819  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-F2

<400> 5819

aattccaggg tcgacgggcg atgttgctgt tgaccatata tggacgcgtt cacaagttac 60  
 ggcaccagtt tcacgtacta gtagcactag tcaatgtgta cgtgcaatgc acgttaattt 120  
 ggaactatat taagtgcatt cagatattaa gtaggatatt atttgtgtgt tattatgtga 180  
 ttagcactat ttttggcatg aaattaacta cacgctaaac gtgttgagcg ctgcacattg 240  
 aatcagtcta ggtcattgga tgagaaggaa tacatgcggc ttgatgacgt tttatattta 300  
 atttgatatg gatctagcag aacattcaat catcacacca tagatttcat tcagtctgac 360  
 tccgacttta cattcatacg atgatcga 388

<210> 5820  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-F4

<400> 5820

tcgacggggtc ccacaatcat ccatgctgta cacacctttt gggataagcc tacttgatta 60  
 ggatttatta gaatatgcta tgagcttcac ttatatcttt tgagcttgat agtttttgc 120  
 ctagtgcttc acttatatct tttagagcac ggcgggtggc taattttgta gaaattgcta 180  
 gtctctcatt cttcacttat attattttga gagtctttta gaacggcatg gtatttgcta 240  
 tggttataaa attggctcta gaatggtagg catccaagtt gggataata aaaactatca 300  
 taggaagtga attggatgct atgatcaact tgatacttga taattgtttt gagatatgga 360  
 ggtagtgata ttaaagtcac gccagttggg ttgatatgaa tttaaagaat gcttgtgttg 420  
 aagttagcaa gtcccgtag 439

<210> 5821  
 <211> 449

<212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-F5  
  
 <400> 5821  
  
 accggtcagg aattccccggg ccgacggggg agaagaaggt gctgcaagca gagaaatggg 60  
 gcctaaacac gaggggaacgc aactgaaag tcagagagat gaacgaccgc ttgaccgctt 120  
 gatgatggca gagcgagcct tcaccaacag agaagggctc gcagggagac cgtggtacaa 180  
 acacatgatt tatgcgtcgt cggaccagga cgactggggc accaaggcgt tccccggcat 240  
 cgtctcggcc atggccaacg cacagaagct caacacgtcg gagtcttggc ggctgttgca 300  
 gcatgagatt tacaggggtg caagggccgt gtccaaggcc tctgcagtcc tggatggaag 360  
 gctaacatga tgccggagta gacatcagca cagcacanca cagcacggaa tttaccggtg 420  
 caaataagta gggaaaggga aaaagaatc 449

<210> 5822  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-F6  
  
 <400> 5822  
  
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 cgccaataat cagcgaagta gctagtcccc gaagacaacc acttcatgtg tgtggcccaa 120  
 acatatgtat ggagaggtgt gtttttgagt aacaatggaa caactttgat gtggcaccat 180  
 gatttcaaac tagaaatccc cacactgagt gagggttagg ttgacgatgc atatgtatgt 240  
 tacaccacac ttcaagccag tgacgggggat tcatgcatgc atgcgtgcat agtatatacg 300  
 gtcaaactta aggtttgaat ctcccggtga cctatactac gataacacga accaaatgaa 360  
 gaatccgcca tggttaccta tcttggtg 388

<210> 5823  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-F9

<400> 5823

gggccagaat tccccgggtcg acgggaagcg gcagtcgac ttagggccact gacgatggag 60  
gacctgagggc aggccaaaaa tcaggtcgcc gcgagcttcg ccgaggaggg cgctgtcatg 120  
aacgagctga agcagtggaa cgacctctac ggcgaaggag ggctgaggaa taaggagcag 180  
ctgacctact tttttagtaa ccggaaggat ggtggatgtg tcgtgttggg caaatcgctg 240  
aagccttggc agagcatgag catacatatg ttgggtggaa aaggagagag gatttcctgt 300  
gagcaaccgt gagttaggat cttggagtga atggactcct tgagatgtgt ggcagggggc 360  
attggatcat gtacgattct tttatacgaa caagtattgt agttattcat tattatata 420  
gtttagctg gtttg 435

<210> 5824

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-G10

<400> 5824

gggccagaat tccccgggtcg acggggacgg cggagaggaa gggcaggacg gcggaagaga 60  
gggggagcag gctgaggaac aagtgaagcg tagtaacttg caaggagctt agaattgatg 120  
gccatggatg aactcccgag gagcgtgcat ggccaacttc ttgcttccga tcccttccca 180  
atgtgttggc atgcatacct gtggttcttg atcatttttc ttactcgtat tggtttcagt 240  
gcatccatt ttttgggtgg agatgtgggg tgggcgtcat ggttgagaga ggggtacatt 300  
tttgtaatta aattaatgga tggaggaata ataatcaagt ggctataatc atatacaatc 360  
tatgggtatc tcactaatca c 381

<210> 5825

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-G6

<400> 5825



ccggtcagga cttcccgggc cgacgagggt tgtcaacatt gagacgtgtg actgcacctg 60  
tcgaaagtgg aatatttctg ggttgccatg catgcatgca attgcagtat ttgagcgcac 120  
tgaggagtat gcatatgact tctgtgtgga gtatttcacg acgaaacggt accgctcgac 180  
ctattcaatg tccataaatc cgatacctga tgttacctta acggacaatt ctcagagtcc 240  
agcgacatta ccattcccaa ttcaaactcg tcgacggggtt ggcaggccga aagagaaacc 300  
agctgatccg cgcatacaaa ttaaaagggc agtgcgctgc agcagatgta aaggttatgg 360  
tcacaacaaa gcaacttgca aaattcctat cagtggcgaa gccttgcccg ccttgccacc 420  
agctgacctc tccgatgtac ac 442

<210> 5826  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-035-Q1-E1-G8  
<400> 5826

ccccggccga caggccgaga ggggaaagga cacatattat ggttacatag tggacatatg 60  
agaacttgac tacggacatg attttaaggt ccctttgttt aagtgcaaat ggggtcaatct 120  
gtcaggaggc ggggtacagg tagaccaca gtagggaatg acaacagtgg atctcaacaa 180  
tcttgcgat gcagacgaac cgttcgtcct agccaatgat gtggcacagg ttatctatgt 240  
gaaggacatg tctaccaaac cgagaaaaag aaaagataag gaagcgaata catcatacga 300  
tgagccaaag cgccacatag ttctttcagg aaaaagggac atcgtgggag tggaggtcaa 360  
gacagacatg tctgaagatt atgaaaagtt tcatgaaatt cctcncttca aagtcaaggc 420  
tgaccaagc atcctgataa ac 442

<210> 5827  
<211> 459  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-035-Q1-E1-H11  
<400> 5827

gggccagaat tcccgggtcg acggggtgac aagaggagtg taaccacttt ctttgaatca 60

tttgcctcgt ctctataatt gcccggtttta gttagtgaag aaaatcacct aaaaaaagtt 120  
 agtgaaaaaa aaacaagtga aaaccgtcac ggcaattcat agggcaacgc tggccgatct 180  
 gactacccgc gtaaagagat acacgttggtc aagaagagaa catcggtgtt tcgttgagat 240  
 tgtcatgaag tgtcactgtc gtcacttctc cactgagcaa cggctccgac ttcaccattg 300  
 acaaccgtca acggaaccct tactgaaaca aacgagactt tgacaatgag ccttgcaaga 360  
 gaaaaatgga agaaatgccc aattttttat taagtttgat attttgatg tcaatatttt 420  
 tctgcttaca ttgtaccaca aaattgcac gtgtcaaaa 459

<210> 5828  
 <211> 347  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-H12  
  
 <400> 5828

tcgtattata ttataatanc ntatagtga tcgtattata cggttgagtc tttgcctcgt 60  
 ctctataact gcccggttga gccagtgtat accctcagct ctgcaaactt gatgtcgacc 120  
 ccacacctca cgaccctctc ggcatttcat agggcagctc tggtcgctct gactacgctc 180  
 gtacatacat cctgttggtc actaacagaa catcggtgtt gccctgagat totcatgaac 240  
 tgtcattgtc atcacttctc catgacgcaa cggctccgac ttcacgattg acaaccgtca 300  
 ctggatccct tactgacgga ctaccgactt ttgacactga cccttgc 347

<210> 5829  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-H5  
  
 <400> 5829

ggtcaggaat tcccgggccc acgggagagc ttagatagta gagttgggaa atccaaaacg 60  
 gtggatgttc ctgaaaagcc acgaatgagc tcagatgacg ttgacaagtt taggaggaga 120  
 agatgcttgg tttggtgatc tatgatatga cgtctgcaca gttcatggag tagtttccga 180

acaccatgga atggggatca agcaactgtg tcatactgta tagcgaggaa caacgccgac 240  
 agttccccga gtagagggat aatagctgtg ttaaattgtg gagaagaaga atgaggacgc 300  
 tgggtgaataa gctgttattt atcaaagagg gtacgtctca acatggtaac tttctcggtt 360  
 aattaacctg tattgcaacc cccagtgggtg gtaggatttc atcatgtaaa 410

<210> 5830  
 <211> 330  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-A10  
 <400> 5830

ccctatagtg agtcgtatta gggactagac gtggtagatc ggactcagct ctccttcatt 60  
 ccgccaagga aaaatcccat ccgcgagcac ctccccatac gcacaagaaa gcgcacctcc 120  
 cttgtgtcat gcaggaggaa aagatcgctc tcttcccgaa cccgtcccc tcaaggatga 180  
 tgcgctgcct acgagactga cgggcagaca ttctctttga aagaccgaca cgcgtcattg 240  
 ttgatcgagt tccccgtgc atcgtaa at gagatgccga aggagagcgc ctttaaggctg 300  
 gtctgggtcga gaggcaattg cgggaagagt 330

<210> 5831  
 <211> 244  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-A11  
 <400> 5831

tatagtgagt cgtattaaaa catacgactc acggaaggga gtcctcgtca cttgggtgac 60  
 tcacgctcgc gtctccgaag aaatcgaaac cagcacacgc acgtcgcagg acggatttct 120  
 gggaccattg ccaggagggt cttcgtcaa gtcaagacag accaggtacc catcacatag 180  
 gccatctccc tcgcatttac aggagttgcc atttgctctc cggttgcctc acccccactt 240  
 cacc 244

<210> 5832  
 <211> 57  
 <212> DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-036-Q1-E1-A8

<400>      5832

tgagtcgtat taaaaaatac gactcactat agggagtcgt attaagtggc acgactc      57

<210>      5833

<211>      369

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-036-Q1-E1-B10

<400>      5833

tggtccaccc tatagtgagt cgtattaagg aactgaatat ctgggtgcagc cgcttggccg      60

tgctgaagac gaagagcatt ccagtgactt cgagccagaa gaagatgggtg atgggtgctga      120

ggacgaggag attgacgatg acgatgctga ggatgggtgag gatcctgtca aggcgcaatc      180

ctcatcaaag aggaagaggt ctgggtgggga ggatgaagat gatgaccaca gtgatgatga      240

tggtgatgat gatgagaagc ctgatcaaa gcgatagtca atttgttcgt gctgatctgt      300

gatcttctct gcttggggcca agaaggaaga taatcctcat ggagaggatt gttggtaaata      360

gctgtagct      369

<210>      5834

<211>      399

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-036-Q1-E1-B11

<400>      5834

accctatagt gagtcgtatt agctgcgtgg tgacaagtac agcactgatt gcctcagctt      60

gtacttatac ctggatgcat cggatgagct ccatctcgag tccaagatgg tggttgtgat      120

gactcgggtcc atcctggacg aagtgaatgg gaaacacttg actgcaactt caggtctctt      180

agtgtttacg ggtggatgcg gctggggatg ggctgatttc cttggactca agaattctcaa      240

ggacccgtcg ggaggctatg ttgtgggatc gagctgcgtt gtgaaggccg atctcactat      300

cgttggttca tccaatgatg gttagatgtt tacctcatgg cctgatggag agataatgcc      360

cttacatcct acgtatgact agacttctat ttgagataa

399

<210> 5835

<211> 338

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-B12

<400> 5835

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cctcgcccct tcgaggaaaa ccaacgcaag ctcaagacgt agcaagaaaag atttctggca 120

gcattgccag agaggtcttc gcgcaagtca agacatagca ggtacccagc agaaacccat 180

ctccctcgca ttacattat ttgcgatttg cctcgcggtt tctcgcgcc cacttcagca 240

ttgccgtttt attgaagctc tctttccgaa tctccgcctc tcttttcgct tcccttcttt 300

tgtgtgctcg tttgcttggt tgaccttatg ggcgcgcc 338

<210> 5836

<211> 443

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-036-Q1-E1-B7

<400> 5836

ggtccagaat tcccgggtcg acattgtgca aagctgggga tttggatggg gcgttggagg 60

tgcataagaa gagtgggcag ttcaagcatg tcctgggtgga tccgaggcag tacggtgtgt 120

tgatggagag cttgtgtgca ggtggtaagt gtgatggtgc tgtgcagggtg ctcgatgagc 180

ttctagagaa gggcacactg cttagcccaa agagtccagt gatggaagca ccggcttata 240

atccagtgat tgagtatttg tgcgacaatg ggaataccaa caaggccgag acgttcttca 300

ggcagctgat gaagaaaggt gtggatgaca agtctgcatt caacagtctt atccgtgggc 360

atgcaaagga aggtgcgcta naggccgcaa aggagattct tgccattatg acacgccgtg 420

gcgtccctac tgaccccaact cgc 443

<210> 5837

<211> 459

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-B8  
 <400> 5837

ggtccagaat tcccgggtcg acggggaaga tcgtatggat ctgatgagag ctgtgattat 60  
 tggagcaagt ggcacaccat atcaagatgg tctgttcttc tttgacttct atcttccacc 120  
 tgagtttcca cgagctcctc cgtcggcata ctatcattct ggcggcctgc gtgtaaatacc 180  
 aaacctttat gtggatggga aggtttgttt aagcctctta aatacttggga ctggcagagg 240  
 gaatgaagta tgggatccat cctcatctag cattctccaa gtactagttt cactccaggg 300  
 gctggttctc aatgaaaagc cctatttcaa tgaagctgga tatgagaagc aagtcggtac 360  
 tgttgaaggg gagaagaatg cactgccata caacgaaaac acatatctgc taagtgtgaa 420  
 atccatgttg tatatcttga ggcgacctcc tatgaattt 459

<210> 5838  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-C3  
 <400> 5838

attccagggg cgacgggggca atgaaacacc caatTTTTTT gtgcagttcc accaaaatcg 60  
 agcatccctg ttggcacata tattgagaga gtgagattac tgtaatatgtg ggactacttg 120  
 atgaaacata cactaacaaa tagaagcacc gtcattatct taatgggtaa agttagcaac 180  
 atagtagtct tgcttaaaga gaggtattag tttatttaat cagtgccaat tagctcaaca 240  
 ctcaaagcat taccatttat cataggttgc aaaactttta tgtgcaaaga taaaggagtt 300  
 tctcatgaca gtagcacgat acaaataagag atgacaacaa actaatatgg atgaaggcct 360  
 taggcccgtg acaacgtgag aaaaaagct tattcatgta gtcccataag agatgataaa 420  
 gcactcactg gaatcacact atagtatata tttttgtgca c 461

<210> 5839  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-C7

<400> 5839

gatgggaaac cctaaagtga gtcgtattat ttataaaaa ttatagtatt attgaaacca 60  
aaattatata aaatttatgc aactaaaatt atcaaagtat tttctgttca aaacattaaa 120  
agaaaaaaga attttcataa agaaattttt tgtagaaac tttaatagca gaaagaatta 180  
tcataaagaa ttttctgtta gaaactaaaa taacaaaata tgtttttgaa tataatgata 240  
aaacacagta atatttaata gcatgaaaaa agaactactc aaaaatctac ttttatagta 300  
aagctattca aaaactagtg actcacacaa atttccaaaa attcaaattt aaactattca 360  
aattagaaaa caaatggcac taacagaaag tttaaatttt ttagtacata aaagcaaaag 420  
gaatcactga aaaact 436

<210> 5840

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-D2

<400> 5840

cctatagtga gtcataatat gagcgagaca cctttgctaa aaaaaacaag cggcacatta 60  
acataaaatt ctttttcctt atgtttgttt ctttttctt cactttagaa aatgttccag 120  
aaatatatgt ttggacaagt attctcatta aggggttggtg tattctcatc atgcatctct 180  
aataagtgtt cacctattta aaaaataatc attaactaaa aagttgtcag tattgtcaaa 240  
aggctcacat caataaaatt ttctcggac atttccaaaa aaaaaaactc taagttgaat 300  
agtttctaga tgaaaccgca aacattttca caagtacata ataacatttt caaaaaacaa 360  
acaagaataa caattttgaa atacaccaca tttttctaaa acaacaacat at 412

<210> 5841

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-036-Q1-E1-D5

<400> 5841

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atcatttacc tactcgagga cgagcaggaa ttaagcttgg ggatgcttga tacgtctcca 120  
acgtatctat aatTTTTgat tgttccatgc tattatatta cctgttttga atgattatgg 180  
gctttattat acacttttat attacttttg ggactaacct attaactgga ggcccagccc 240  
atattgctgt tttattgcct gtttcagtat ttcgaagaaa aggaatatca aacggagtcc 300  
aaaaggaatg aaaccttcgg caatgtgatt ttttgaaga atatcatctt ggagacgtgg 360  
actccaagtt agaagatact cgaggactcc acgagatagg agggcgcccc cctgtanggc 420  
gcgccccctg tctcgtgggc ccctcga 447

<210> 5842

<211> 321

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-D6

<400> 5842

ctcacgggtc gacgggactc catatagtga ctcgtaatag caggatcgca agatgactga 60  
ttcaaataag tcatacaacg tccttggtca accgtcatgc tccagttcag tagagaacta 120  
cactatgatt ttttgatcta caagagtaaa catatatgca tcatacggcg gccgctcgat 180  
atgattcaaa cgtaattagc atgtgctgaa gatctcactc ttcattagtg gcagttacac 240  
tccattcaat gggcgctcgc atataacgc ttgactggga aatccctgta gttcactcac 300  
gtaaacgcca agcatcacat c 321

<210> 5843

<211> 412

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-036-Q1-E1-D7

<400> 5843

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cgtgggggtg ttgctggagt cgtactaggt cgaggctgac cggggacgga ggaggagggc 120



gctgacaggg acgccgccgg ttccgtgaag aagaggaagc agagaagcat acgacgagga 180  
agaagccttc ggggtcctcg tggtcgctg cgaggggtgag gaagacgacg aagaggggtcg 240  
gggttctctc cccgtggcag caacgcagac gacggagggtg ttcaggccgg ggacgagctt 300  
aagctctcct catccagggc gacggctatg gtgggcgacc tacctgggtg ctgcagcagg 360  
gagaggggga aatggagaga ggagaggcta nggtanggtt tggagaagtt tt 412

<210> 5844  
<211> 144  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-E11

<400> 5844

ggtcgatggg gctcgctagg atgaatcatg ctacgacgaa gccttctaag cgcaagaaag 60  
aagtcggtcg ctcaagaaga tccacgctta cgtacgcgag tatacgaggt cagagctcta 120  
cgaaaatgtc accgaacttc aatt 144

<210> 5845  
<211> 377  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-E12

<400> 5845

aagtgagtcg tattactgct agcatatccc aactactca cgctaacaat gtcaattatg 60  
ttctcgacgg agcttcccag ctacacagca ctcggtgtac ttgttcttcc cctgtactac 120  
ttgtactcca aggctagttg tagattaaag aagcctgcag tgctccccac aaactggcca 180  
atattgcaca tgttcccttc ctctctggcc agcctccaca agatgaatga ctatttcacc 240  
ctggtcctcg ccggatcagg cccaacttc agggggcacg gcccaccggg gaccgggatg 300  
cggttgttcg tcacatgcga tgccgccagc atccgggaca tcttcacgaa gaactagacc 360  
aacgtttcca aaggggc 377

<210> 5846  
<211> 314

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-E6  
  
 <400> 5846  
  
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 catggatcaa tggaagtttg catctaactg gcatgcagtc cgctcaggca ggtcaatggt 120  
 tcagaaaggc actgttcttg ttgcagctc atcttgctat ataagcgtat tcctactcag 180  
 aacaatcacc tgattccacc ttgactgcga ctacgctaaa ggatccaacc ttacatgccc 240  
 gtgaatacaa cctcatatcg caactatagt gtaacaactg ttcaattcac aggactatcg 300  
 ttttacaacc atct 314

<210> 5847  
 <211> 81  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-F12  
  
 <400> 5847  
  
 tgcgacaccc tatagtgagt catattagtc cagggatgtc gataagggca gtgttgtaat 60  
 acctactctc tcgatgccgg t 81

<210> 5848  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-F6  
  
 <400> 5848  
  
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 gcgccgacgt acaagtacaa gctcaactcc gacacctatg ccggcgagac gaccaaacc 120  
 aagaggaaaa ggagaacacc ctcatggtgc gaccggatac tgtggcacgg caaggggata 180  
 gagcagctgc agtacatcgg gggggagcac cggttctccg accaccggcc cgtctgcagc 240  
 gtcttcgtgg tcgaggccga cgccaacaac gggagcagga tcaggaacgg ctactccacc 300  
 ctggactcca gggttcattg cgagtcgccg ttgccgatac cgcagagaca cagcttctat 360

gacttttgac ctgttatagt gatcctcttt tgtcgatact tcttctatac gttacaagga 420  
tcagaaatgt ctattgagac ggggggctga acgtttttc 459

<210> 5849  
<211> 92  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-F7  
  
<400> 5849

atagtgagtc gtattaaaca ggaggtcgca atcgatggag tcggcttcag caacatcagc 60  
cagttcatct ctttatgcag cgtcaagcag gg 92

<210> 5850  
<211> 215  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-F8  
  
<400> 5850

atagtgagtc gtattaaggc gagacgatca tcacaggcac gaacacatta gtcgcgccac 60  
gggctttggg caagccactt gggctggacc aagaaagatg agagacgaga gggtgctgcg 120  
gccgagctag acatcgaagg agtgagttca gacatctggc gctgaaggag tgagggtccgt 180  
gcgaggtga ggtcgtcggg gtgatcacgt cccac 215

<210> 5851  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-G11  
  
<400> 5851

cctaaagtga gtcgtattat gctctaaaag atgtgcgaga ggagttgaca attcatggcc 60  
ccagcgagtc accaaccaat cccatcgggt ccaatgagta gcggagctag gcaggaatca 120  
tgggggcagt caaaaaatgg aacaactaag agggtaaaaa ataatctttt ctttatctaa 180  
tctccacaca gtaaaatttc ttcactgttt tgcctaaggc tgggggtcgg cccctcaga 240

catgcactag ccttcgccac tggttccaat atatgtgcga gaacaacagc acatcgga 300  
 ttcttagtct acgccttggtg caagcgattg cccctacttc cgcggatgtg gtgcacatat 360  
 tttggaggaa acagtaaaat gcaacaaaaa aaattaaaaa ttaatatcaa cttcatttgt 420  
 ggca 424

<210> 5852  
 <211> 269  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-G4  
 <400> 5852

atagtgagtc gtattagata tatcatggag gtataccagc atatataaat agtgctcgat 60  
 ccataattta tagctggatt tcaacactta tatatctaga ttacgcccc tcaaaaaatt 120  
 atatatctag atctatgtta ttacagtaga cacaatgtca tatatgacc acggtgattg 180  
 tacttatact attcgtgcaa tatatatgta tatatacatt cgtgtaagcg tgcaaatatg 240  
 taatgatagc tctattaaat tatgttctc 269

<210> 5853  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-036-Q1-E1-G8  
 <400> 5853

gggtcgacgg gacatcacac caaagccacg ccttcattcg aatcattttt gactgtccca 60  
 cctcagtgcg ttttgcgagg cagtttcctt ggcacatctt gttgaagcag agatcatgtc 120  
 cccttatcac gggattctca tcaatacggg cgttggtaac ccaaccgtgc caatgattac 180  
 gggacttggg ggaaaagcga gttttgccag gctggtgggg acacatagcc ttatccgccc 240  
 atataagggg ataaggattc atccttttat ccacgccttc ttcctccttt gctcatccat 300  
 cttcgcacac tcgagctcca gcgcccaagt ccgcatttcc cacctcaacc ttctccaacc 360  
 atgtccggag tgggaggcan gtggatggtc tcctccgtca cgganggaaa catcaagaag 420

ctgaggagag ccggatacct g

441

<210> 5854  
<211> 420  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-H1  
  
<400> 5854

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gcagttgagg tttctgatgc tgagcagggg aaggcagcta aggtttctga tgctgagcag 120  
ggcagggcag ctggagatat cattttggag gaagatccag ttgaggggtgt tgttgagact 180  
cgtggtagtg ctgctgcagg ccaggagaag tctcctgcag cagagccatc agttgatgtt 240  
gatgctgggt ctccaactct tcctagtgtt ggagagccaa tggtttttgt tgtttcagat 300  
tctccagctg ctccagctgc tgggtggtgtc cttcccgaca atgctgctat gtcaactgga 360  
gatgatgatg aagagactga aagcgatatc tatgaagccc aaaaaaaaaac aaccaggggc 420

<210> 5855  
<211> 245  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-H11  
  
<400> 5855

ttgtaacacc ctatagttag tcgtattaag cgctcggaaca ggataaactc gggaggggct 60  
acgtcgttgg gaagctcgtc tggctctgat ggaccacta tgtgaggagc cccatcgtgg 120  
taaatgccct ggattgagat tttcattttt gtggtgtgta gccaaggga aggaagtgtc 180  
atgagtttag gaattttctt ttttagttta ctgagaatga gatgagttta taggttttag 240  
ctcaa 245

<210> 5856  
<211> 387  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-H2

<400> 5856

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ccggcgaagc agatcgacac aataaagaag ctgcagctcg gagcctgagt gaggtctact 120  
accccgtgga gatgtggaaa attgtaatca gcctggcatt tggtttggtt tggctccgtg 180  
gtgacaaata atgggtggaa acgcaggata ttcccagctt gacgattccg tgtagttcgt 240  
gaataattgc taccagattt tattcttttc gtgctgtatc tagtttggtg gttctccgtt 300  
gatcatcttt tgatgtccat gcatcaatta attcataaac ttttggaana aaaaaaaga 360  
aaactcaaaa aaaaaagcgg ccgctct 387

<210> 5857

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-H5

<400> 5857

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aaagggatgc taggttgtga agcaaaacta aagggatgtg gataaaggga gggatgatag 120  
aaagaaggaa gaggaataa ataagatata ggattccact atgtatggtc tatgaattac 180  
atcataaaag gcaatgtgat aaagcatcaa tataataaaa ataatagaga attaaaaatt 240  
ttaacttgaa acaagaacta caaatttaaa gcaataataa agagccgccc gggtaataa 300  
aactgagaaa attaatcgg aaagaaattt tttggaagct ccgttgccggg attcagacct 360  
aaccattcaa ggagaagcag tgggaacgac agaacctatg attccatagg attttattga 420  
aaagaatcct aacac 435

<210> 5858

<211> 233

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-H7

<400> 5858

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catgctgctg agaaccactg tctacgaaac ctgcagcagc gtacattgtg attttttttc 120  
 tcccccttcc cccatttgtg atatctgttc tttgttgctt agagtatatt atgtccgaat 180  
 tgtatttata cacactgtga caccgactat ttatataagg cagctgttgc atc 233

<210> 5859  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-A1  
 <400> 5859

tcgtatgtcg atgcgactcc ctatagttag tcgtattaaa ccattccgag atatattgcc 60  
 atgcaacttt ccaccgtcct gtttattatg acacgcccc a tctgtcatat tgcttttgca 120  
 tgatcattta gttgacatcg tatttgtggc aaagccacct tgataattct ttcatacatg 180  
 tcactcttga ttcattgcat atcccggtag accgccggag gcatccacat agagtcatat 240  
 tttgttctaa gtattgagtt gtaattcttt agttgtaagt aaatagaagt gtgatgatct 300  
 tcgttattag agcattgtcc cagtgaggaa aggatgatgg agactatgat tccccacaa 360  
 gttgggatga gacttcggac cttataaaag aacagagttc tccgtc 406

<210> 5860  
 <211> 187  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-A10  
 <400> 5860

attacaacac cctatagtga gtcgtattac ggctccgctc gacaccgcca ccacggctcg 60  
 aatccgcacg tctctcaccg atcacggaat gagggtagaa acaacagcag gatcagcagc 120  
 tcaattgggc atgtaccgta cgatacagtg aaatcacacc gtgtcccagt catgtcatgt 180  
 cgactgt 187

<210> 5861  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-A11

<400> 5861

gttggtcaat aggataccct atagtgagtc gtattaattt tcatgccttc tactttctgt 60  
gctaattttt tggctttaga ttttatgaac tatgcaagtt acgcatctat tcatgtgtca 120  
gatatggaaa aatcaaggga agtaaaaatg aatgacatat acatatacaa catgtacacc 180  
ttgtctcttt tgtaacgat atttcagatt aagcaacgcc gaggacggct ttattttcaa 240  
gaaggggagg atgatgagga caggactacc ttggatatga ccaataatat tgcatatatg 300  
catatttgtc aggtgatttc tagtgcaaac tattcaataa tctacttatg ttatccagaa 360  
caciaatacg tcacacactt ttgtgttttg tacaattgca ggtgtatggg acatttg 417

<210> 5862

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-A3

<400> 5862

gctatagtga gtcgtaatag atctacgggt tgtgctgata cactactata gcactacatg 60  
gggaacctaa gctacctaat cctcgtgtac tttcgacata cgttcgtcca gagtaagctc 120  
tacgatgaaa gcttgaacct gcttgtgatg gagatgttat tactgtggtg acctgaaatc 180  
ttgagtcaca gaggctttca agcattatgc acagccactg aagaaatact cggacacata 240  
caccataat ccatcatgcg ggactttgcc tcagattcgt gaattacagg atgaatgatg 300  
tgatgttcaa actgctggat atggcttact gaagacgtac cacggaaca acgagtactg 360  
tccgttttca gat 373

<210> 5863

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-A5

<400> 5863

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ggaggagaca tggataattg gtgctctact tacttttgtgt tgtggtcggg ggtggtcggg 120  
 tttgttcgcg gagactgctg ttattagtct gttggccgag ttgtagagaa ctctctttgc 180  
 tgctgctgct gttacttcct tctgatgttt tttcgttttg ttattatata gccggatgaa 240  
 gaaaagatga tgcagtttta tctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagcggccgc tctaaaggat 360  
 ccaagcttac ttacccttgc atg 383

<210> 5864  
 <211> 338  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-A8  
 <400> 5864

accctatagt gagtcgtatt aaaatgacat gctgcaataa gttgacaccg acaaagatgg 60  
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 atcacgcac tacccgagag gcatattcag gagccttctc atgacgcttg tgacggacgg 180  
 ttccgtcaaa ttggacgtga attaaaagcc atgggtgtga cttgtgcatg tatgttacag 240  
 catttgggcc ccacgaatca acagctcctt taatttttgt catggtcttt ttgcgtggaa 300  
 atttagatca gtggaacccc atcagattgg ctacatg 338

<210> 5865  
 <211> 400  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-B11  
 <400> 5865

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 atatcagtac cgtggccacc tgattcattc attgggttat gaggattctc atatttgtgt 120  
 gtcatgcact atcaattgaa atttccatgg acgtacttct gggggcctct tttcagagat 180  
 tactgtcatc agagtagcca tatcacacgg caattgcctt ggcgacagct caagtattca 240  
 tggcaattgg acagcttcag ctttgcaatg agtaggctcg gcaaaatgta cattggcaca 300

ttgcttatcg agctctggta ctgcacccac tgggcatcg tgccagctgc tgcctctgaa 360  
 ctgtttggcg tgaagaattt cggagcagtg tacaacttcc 400

<210> 5866  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-B12

<400> 5866

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 agtctcgcga aatctcgaag gttgggtgata gcgtgttcat tgaggaaatg cctgatattc 120  
 taaggagacc ttcttctcct ggtatcgtga agacttgttc ccctaatagga aaaagagttt 180  
 caccgccaca taatgcactc agcatttcag caaaccgaaa aggagggcgg aagctgatag 240  
 tgaaatcgat ggctccttt ccatcagtggt ttggggagac gagcgggtgga tctgcaatat 300  
 gcagctccga cagcagaaca gctcttgctt taggtccatc gtaaaagctg ggctgggcag 360  
 ccgattatcc gcgagcggag 380

<210> 5867  
 <211> 360  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-B3

<400> 5867

accctatagt gagtcgtatt atgtcgccgt ccaatggtcg ggaactcgtc cgaggatgag 60  
 tacggcatgg gaggcggcat ggcattggtg gcaaactggc cggctctgtat cccgtgttct 120  
 actcttccgc aacggagacc gcaccttcac ttcacgggtc ttgaaaccgc cgcccgtaca 180  
 tacagatcgc agatggacga cgttgggtcac cgccggtaaa atatgttcac gatcgggttt 240  
 cgtttatctt tctgtccac aaaagtacga actgtagtga caatctggcg tgtctgacaa 300  
 aagctcggct ggtgtatatg aactttcaca atgtacaca tattgtcaga gtattaccaa 360

<210> 5868  
 <211> 360  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-B8

<400>       5868

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ccacctagca tggaagatac aaatagacct agttgaaaca tgagctgctc gagtatacaa   120  
aacagcattt catttgaagg tttggagttt ggcacatata aatttaattg ggacggaagg   180  
taaataccgc atataggaag gtatggtgga ctcatatgga acaactttga ggtttatgga   240  
gtttggatgc acaagcagta ttcctgctta gtataggatg aggctagcaa aagactggga   300  
agcgaccaac tgagagagcg acaatgctac gtcttgagct tgtgttggtt ttccccgaag   360

<210>       5869

<211>       406

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-037-Q1-E1-B9

<400>       5869

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ttctagtgtt atggaacttc acatcgaatt ccaccttaac aggaacaagt actagattgt   120  
agcttggaag atcagtataa gacataaagg ttaaattagt tactcctcgt acaacaatta   180  
cagaatctag actacaacga aacagattca aaatccaacg atgcaataaa ttcactcaca   240  
agagacaata tgctcccatc agccccgaag gcatgtacag aacatcagct ttctgcacag   300  
catcgatnt gatcagctgg actcatagac tcagcacagc accagccggc gaagttcgta   360  
gagcgtccga taagccactc cacaggatca gtaacagtcg atccaa                   406

<210>       5870

<211>       393

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-C1

<400>       5870

gtcgatggga caccctatag tgagtcgtat taaagcttgc gtatgtagcc cttgattatg   60

accaggatct ggatactgcc aagagcagct cctcggttga gaagagctac tcagcttcct 120  
gatggtcacg tgatcatcac tggcgccacag aggttcaggt gccctgaggt cttcttcgag 180  
ccatccatga tgagcattga gtcttctgga atccatgata cgacctatac ctccatcacg 240  
aagtgtgacg tggatatcag taaggacttg tatgagcaac attgtgctca atgggtggcac 300  
aagcatgttc acaggtatcg ctgatcgtat gagtaatgat ataaccgccc ttgctccgaa 360  
caacatgaag attaagttct cgctccacct gat 393

<210> 5871  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-C10  
<400> 5871

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ctctattacg tggaatcggt gttcgtaata cccttggtcac ctatgaccgc cacaatgaaa 120  
agattggatt ttggaaaact aactgttcag agttgtggga gagactccag agtgatgggg 180  
ctccttcacc agcaccttcg agtgatccaa gttcacaagc agatttagcg cctgcgcctg 240  
ctcgaggtgg tttgccagaa tatgatgttg gtcgcagcgc tgtttacatg tcgatagatg 300  
ttacgtatcc aaacctgaga ccgcccctag atgagttggc tgagctgttg gctaaagcag 360  
ctgagataga gtccagtcag gtccga 386

<210> 5872  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-C11  
<400> 5872

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gaactctttg gacttccacg cgtggagact tcgatgtcat taatgatggg tccccagctg 120  
aactcggtag tgttttacta taagactacc acgtgggtcat gtttgtctgg gacagcgtgt 180  
tcacatgttt gtagcaaaac cagctcatgt tttggagctt actatcgtag ttcagtcgcc 240

gagaatcgcg cagcgttgtc ccgtcgaatt gtgttgcaaa ctttcatttt tctgcctaga 300  
ctcgaatgagt ctggaatatc ctgacagcaa ccagatctga atctcaggca tatatgatgg 360  
tttggaaacat ttcccaagaa ctataatatc ggtccctcga ataccggtaa agtggatgtc 420  
gtgggcaaca tcacc 435

<210> 5873  
<211> 89  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-C12  
<400> 5873

tcattacaac accctatagt gagtcgtatt atgttcggat catgagcata gggtttggtg 60  
ccatcgtggc tgtgccccag gttttcggc 89

<210> 5874  
<211> 316  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-C7  
<400> 5874

agtgagtcgt attaagtggg gagcgtcacc tccctctctg gcggtgtcaa tggttccacg 60  
acagcctacc tcggcggaat acgtccacaa catggccggg ctataagggt cgtctgcctc 120  
gccagatct accgagtggg taccaccatc taccactggc tcgacatacc ctgggtcagg 180  
cgctactacg acttcgggtt cgaccacttt ggcatgtctt ggcgacacagt cgggtgtgtca 240  
ggcctacca gcctactcgc tggcacctcg ggaccgttcg ccacacgaga ctggattcta 300  
ccggacctca ccatcc 316

<210> 5875  
<211> 137  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-D12  
<400> 5875

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 ttaaaagaac cagagtgagt atccaggagg tagaaccgtc cgagggagac gcaatagttc 120  
 agagactgta aatggtg 137

<210> 5876  
 <211> 222  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-D2  
 <400> 5876

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 catgccaaga ctacgagact tcacacgccc gaccatgtca atggcgacta caccgtcttc 120  
 gccaacgcca ggataaacag caggaagatc cataaggcca cgtcctgaac atgtgacagg 180  
 cttgaagcaa cactgtgtga gcaattccac gccgtaggac ac 222

<210> 5877  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-D6  
 <400> 5877

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 agcaggagga ttgtttacga agaaacaaca gaaaaaatc atattctgat acagaggagt 180  
 tatataggaa tcgaaatagt cgttgatttt ctttgtgaag aaaaaaatg gatttcattg 240  
 aagtaataaa actactcaa ttcgaatagt agttgagaaa gaatcgcaat aaatgcaaag 300  
 atggaacatc ttggatacgg tattgaagga gttgaaccag gatttcctaa tggataggat 360  
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<210> 5878  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-D9

<400> 5878

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tatgtcataa tgtaagcatc tgtgcatccg ctgtacagca tcagtctcac tagtcccaat 180  
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<210> 5879

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-E5

<400> 5879

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cagacaaaaca ttatcacatg gtagtcttac aataaaacac taccgagttc aggtggggaa 180  
ccatcattaa tgacatcgaa gtctccacgc gtggaagtcc aaggagttca ccttagacag 240  
actcctttat ctttgaacaa ctcaatcagt ggcttggtgt gctaggatat acatatggaa 300  
tgaagatgat tactctaaca gaccacagaa ttcttcgcac gagcatgact gacttgggat 360  
gactccaaag gaggtaaaac aagccttctc aaattcacga cggcaactta catcaaatgc 420  
a 421

<210> 5880

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-E6

<400> 5880

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atatatggta ctgatgctac tatttgtctc ttgataggca tacgggtgggt acgataatga 180

ccagagggca cagccgtatt cctatatact ctggaagacc aagcaatatt atcgggtctta 240  
tattggtgag taagctgaca ttttcaagaa ttaactgcat tgattgagat cacatctcat 300  
tagttagggt cattctgcta catatgtttt tacggcctcc atgttatgag ctctcactgg 360  
cgaacatttt tggagttgca ctgttcagac cggtgtccta acaagacttt g 411

<210> 5881  
<211> 240  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-E8  
  
<400> 5881

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cggcatcggg atcctgctcg tcgtcagtc tcatcatcat catctcgatc gtgctcacga 120  
gtagctggag gaccaacaga aatcataacg agcggtagta ggaatagggt gtgatgatat 180  
gatcctgggt tgcattgcatt cttgctgggt gttgttgatc gcttattgtg gaattttttg 240

<210> 5882  
<211> 121  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-F10  
  
<400> 5882

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gggaagaacc ccgatgagtt cagcaggac gtgctcaaca gctgcatcgc caagaggcag 120  
a 121

<210> 5883  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-F6  
  
<400> 5883

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tgacaaccac cgactgcatg tggcccaaac atgtatgtat ggaaggggtg tgtaatgttt 120  
 taaataacaa attcatgact ttgatgtggc acttgcacaa caaaagggcc aatcctagac 180  
 ggtgggttgac gacccatagt gtactggcag cccccctccc ccccaacaca cacaccgcac 240  
 atccaccgcc tctatgagge atgttaaaat tttctgctat gaacatatgt gaccaaagga 300  
 gtgtcgtgtt aaaatttgaa aaaaaaatca gagatcattc aaacactttt gtacattgat 360  
 taatttccta gggatataat gtgcggaaat caaattagag ctacatgcac acgtgatagt 420  
 gcaccaaagt ggtagaaa 439

<210> 5884  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-F8  
 <400> 5884

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 acggccgttg gatggacatc gtacggtcag tggagctaga atcgttcata ttgactaaag 180  
 ttgacaaagg cccccgtccc agtcaactta gtaggccac aagtcagcct cccaccatgg 240  
 tgggtcccg aatgcagggg aagtattcat tttttgtgc gtaataagga ggcacttccg 300  
 gtgggtccga gctgacagcg gggggaacgt tttttttgc aaaatacgct ggcccgtccg 360  
 gtgggtccga gcagtcaggg ggaaacattt ttttcgcgaa ataaagtggc c 411

<210> 5885  
 <211> 349  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-G3  
 <400> 5885

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 taggttcagg ccctctctat ggaggttaata ccctacgtcc tgcttgattg atcttgatga 180

atatgagtat tacaagagtt gatctaccac gagatcgtaa tgactaaacc ctaaaagcct 240  
 agtctggcta tgattataag gattcggcct atctacggac ctagacctcc ggtttatata 300  
 gacatgggac ggatctaggg ttacacaaag tccgttacag ataaaggaa 349

<210> 5886  
 <211> 126  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-G4  
 <400> 5886

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 caatcctacg tacgcatgca tgccacgtga taacgctgca atgctgtcac gctaaattca 120  
 attctg 126

<210> 5887  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-H1  
 <400> 5887

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 caaggcgaag agaaaaggga ttgcttcctc gtccggttcg agctggaatt gttggatatt 180  
 caaatgtcgg taaatcttcc ttgattaatc gcttgctaaa acgaagaatg tgtccagcag 240  
 cacctagacc aggtgtcaca agagaactga agtggggttcg ttttgggaag gatctagagc 300  
 tattagactc acctggaatt ttgccaatga gaattagtga tcaggcagct gcacttaagc 360  
 ttgctatccg tgatgatatt ggagaaaggt catatgattt tg 402

<210> 5888  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-H11

<400> 5888

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tatgcccccc cttcaagatg tttatgaaaa ttaaacgagc cgaaggcgag caggagggtc 180  
cctcgtgcct gaggcgccgt gtcacaccgt gacggacaat gcgccgcacg aaccagcacg 240  
ccgcacgaac caacacgccg cacgaaccag cacacacttc gaccagcaca cacttcgacc 300  
tatgcccccc ccccttgacg atgtgtatga aaattaaatg agccgacggc gagcaggacg 360  
ttccctcacg ccggaggcgc ggtgtcacag cgtgacggaa aatgcgccgc acgagccagc 420  
acgccgcagg 430

<210> 5889

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-H5

<400> 5889

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atccagcgac cacttcatgc accatcctct tgtgcaatct gtctgtggaa ctacatgtgg 180  
tagaatatgt gccctgaatc gtcaacgggt acaattcacc attgatttgc aggctacgat 240  
tgacatgaga ctattgttga tgcttctcga cgctcgcag tcatatgtaa ctgtctagag 300  
taagttgttc ttccacgtac tagcgcaact ttaagcgtc agctttttat ttcattggcct 360  
gttagaatgc caatgcacct taatctcacc tacacgcatg gatcaacgtc gaattgagtt 420  
atacgaaact tggaaaatt 439

<210> 5890

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-H9

<400> 5890

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ctacctgatc atacccaatt ggataaagtg tgtagagatc atgtccgtat accgtacgtg 120  
ctactgaagt aaaagattga gtctgtgtct aagggtactt atataacaaa tcaagttatt 180  
cctaatatct acatccctca tcatgacagg gtacggcata acccacaatt atgaagttac 240  
ctagcacatg agcaactata catgacatca tcgcagtctc ttacaccgtg tgtgggcccc 300  
ccctcgagag tgcactacat gatccatac 329

<210> 5891  
<211> 214  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-038-Q1-E1-A1

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tcagttagtg aatattctcc ttgggtcctg gtttagtatt ttcggagtac atgcaagtta 180  
ctgtaacttg attgatagtg ttgttaagag atat 214

<210> 5892  
<211> 441  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-A10

<400> 5892  
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cattccatcg aacaccttgt gtgcatagga ggtgagctag agcatcacca agccctctcc 180  
ccctcggccca gaaaaaacag agcagtgtgc tctgtctttg cgtgaggggg tatatatagg 240  
caccatcatt ggtcccgggt ggtggcatga accgggacca aaggcatccg ggaccaaag 300  
gtccggacga accgggacca atggcccacg tggcccggcc ggcccctggg ctcacgaacc 360

gggccaaata gcctcattgg tcctggttct ggattgaact gggactaatg ggctgacctg 420  
gcctggacaa tagccccctt t 441

<210> 5893  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-A11  
  
<400> 5893

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gaggtgagct agagcatcac caagccctct cccctcggc cagaaaaaac agagcagtgt 180  
gctctgctct tgcgtgaggg ggtatatata ggcaccatca ttggtcccgg ttggtggcat 240  
gaaccgggac caaaggcatc cgggaccaa aggtccggac gaaacgggac caatggccca 300  
cgtggcccgg tcggcccctg ggctcacgaa ccggggccaaa tagcctcatt ggtcctggtt 360  
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<210> 5894  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-A2  
  
<400> 5894

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gctgcacgca gaggtactac tcagcggaag acagttgagg tcgagtctgt tgcagctgca 180  
gggaagcaac aagctagaga agtagtgaag aaatctttcc gtgccgagtt cctcgagaag 240  
ctgcacaaag atttgatga cgatatcgat gtgagagcct tggcaaatgg atttatatct 300  
gtcactctc tgaatgtgca cggccatgtc gagtctgaac tcgaagctcc agcgtcagac 360  
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ctcagaaatg tacac 435

<210> 5895  
 <211> 465  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-A4  
  
 <400> 5895

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catccggctg gacggaaacc tcctcggaac cggcgacctc accgcctaca ataagaactg 180
gatcgagggtg atgcgcgtgg acaacttcac catcaacggc cacggcacca tcgacggcca 240
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caacagcctg gtgctggact acgtgaacaa cgcgacgac cgtggcatca cgcttaagaa 360
cgccaagttc ttcaacctca acctcttcaa gtgcacgacg gtactggtgg aaaacgtgga 420
gatcactgcg ccggtgaaca gcccacaacac tgacggcatc cacat 465
  
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<210> 5896  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-038-Q1-E1-A6  
  
 <400> 5896

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ctctgtctat tggaattcgc ccaatgatg tgcttggggt ttgttttgat tgatggacct 180
taaagctgaa gcattaatgc atgaacttgc taaatggatg gagcaacagg catagaagaa 240
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cctgctaagg tacgtaagag tgatgataat gttacttaaa ggaggccaca acttgcacca 360
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catgtaagga tggagcataa ctcacca 447
  
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 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-A8

<400> 5897

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 ggattgtgga gaatggcggc cttaccacgg cagcggatta cccatacacg gcggtgaggg 180  
 gcgcctgcaa ccgcgccaag tccgcccac acaccgtcaa gatccttggc ggcggcgtga 240  
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 ctatcgaggt cggcagcggc atgcagttct acaagagcgg cgtctactcg ggcccctgcg 360  
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 ccaaatactg gctcgtcaag aactca 446

<210> 5898  
 <211> 301  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-B11

<400> 5898

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 tatgctagag ataacagttg gaggctttca gtgatagttt gtcttgcaat ggggacataa 180  
 tatttctagt gagtaaaaga cggacgtggg agagaggaat cagcgcagag gagatcggcg 240  
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<210> 5899  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-B2

<400> 5899

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cccgacatca cgaacgtggt gttcaccag tgatctacaa gtagcctggc cggcttgatg 180  
ccatcccagt gactaagtg gcgacatgta cgaaatgcag cgagattctg tatcatctac 240  
acacgagttt cgatgtatcg tttgggtata caaagttgca gcacacacaa aactacaat 300  
gggaaatgac atggaataat tcttgccat tggaagccgc ctccagaact caccatccta 360  
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<210> 5900

<211> 441

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

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<400> 5900

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atgaggtgat cctggctctc atcacaatcg gctgcttgc gctccaacct gctcccctga 180  
cggcctatcg tatctctgc tttctacagc aatgtcgctg atgctcagag catctttgtg 240  
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ctcctctcct ccttgagctc acggagctcc acgtccttgg ccctatgctc cgcaccttg 360  
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gcactaggta gaagcaatgg g 441

<210> 5901

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-B8

<400> 5901



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aaaagtgcac ctactcggaa ttcacaaat ttgggcctct ccagtgagga agcacgattg 240  
ttaaagcgag ccctggagtt caactggcat gcgctattgg aggatattgg tctttggatt 300  
tcaccagaag tcccacacac cgagcatgat gacaaacctg agaatgaacc agaagaagaa 360  
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ggtggtgctg ctgtgagatg gggattaac 449

<210> 5902  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-C10  
<400> 5902

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gatgaggtgg aatgcaagaa gccaaagata gcagaaggct caagggtcca aggagaagaa 180  
cctgaggctg gagggataaa gaattcctcc tgggtctgat gacaggggaa tgcagtaaac 240  
accagaagca tcaaaactat gatctggaac agtatcctga ataaactatt ttctggatta 300  
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gtggatgta agttaacgtt ctat 384

<210> 5903  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 5903

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aggtgatgga tgcgatgctg caagaactgt ccgcgggcggc tgcggcaggg acgaggaggc 180  
 cgagtagagt ggtgtacctc ggcgatggta ggggcgacta ctgccccacc ctaaagctgg 240  
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 accggcgggc cgtccgcgca gacgtgcgcg ggtgggcccga cttcaaggac ctgnatacgg 360  
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<210> 5904  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-038-Q1-E1-C4  
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 tttattttgt tagtttttgc ttgatgttat ttagattaat gttttgcac attaggttca 240  
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 tgaaaacaga aagtttaccg ctgttgcaa aattccctag aaaagttaga gaatggtcta 360  
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<210> 5905  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-038-Q1-E1-C5  
 <400> 5905

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 agcgccgcc ctaaagggtc caagcttact tacgcttgca tgcaacttca tacctcttca 180  
 atagtgtcac ctaatttcaa tt 202

<210> 5906  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-038-Q1-E1-C6  
  
 <400> 5906

accggtctgg aattcccggtg tcgacgggag agagtgtgtg agcatgtttg agagaccacc 60  
 gacggagggt gaaactacac gtaaaagact gatgtacaca ttgagaaaaa acataaattg 120  
 tatccaaaca ttaggatggg atcatgatat ttgcaattcg cgtaaggaaa ggtcattgat 180  
 ccatcagaca tctagattct attgaatttg agcatgtcta tgttattatt cgacataatt 240  
 gatccacata gttagtattt tgaactccag acaatgcac gctttagcaa tggaatataa 300  
 acgtgagtat aattcatgtt gtgtgtgtaa agcacattat acatacgaaa gttacacaat 360  
 gaacattata aatagctagc taggaactag catacatttg aattcaactt aagggtggtt 420  
 aaaaaattcg aattcaacat gaagtccatt 450

<210> 5907  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-038-Q1-E1-C8  
  
 <400> 5907

taccggtcaa gaattcccggtg tcgacggggg ttgctaaggc tgattgcttg gatgatttgg 60  
 cttttgcaat tatgcaagag atgagcaa atcatacag ggttactgaa gaggatgtta 120  
 ttctgtgcacg caatcagttg aaatcctcca tccaactcca ccttgatggc tccactgctg 180  
 ttgttgagga tattggacgc cagcaactca tctatggccg tagaattccc attcctgagc 240  
 tttttgctag aatagatata gttgatccca gcactattag gcgtgttgca aaccgcttca 300  
 tctttgacca ggatattgcc atcgtgcca tgggaccaat tcagtctctt ccagactaca 360  
 actggttcag acgcaggacc tacatgctcc gttactagat gattcgacca gcggtg 416

<210> 5908  
 <211> 431

<212> DNA  
 <213> *Triticum aestivum*  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-D1  
 <400> 5908

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attccccgggt cgacgggggta ttgaaactct tgcattcttt acagactgta ctgttttggc 60
agattgctgg tatgtttgcg ttgtttgcat atgttcgctt atttaatgat tctatttgag 120
gataggagta ttaaataatgc agaggcattt agtattcaat gttgaataat aattttgggtg 180
atttggtaca gtagaatatg ataaggtttt gcattggttt atactaacct atctcacgag 240
ttcttggtga gtttggtgtg aatgaagttt ttgataaaaa gaaagaccat gatatgagag 300
gaattaagga gacgcaaaag ttcaagcttg gggatgccca aggcacccca agatattatt 360
tcaagaagtc tcaagcatct aagattgggg atgccccggt aggcacnca cctttcttct 420
tcaacaacta t 431
```

<210> 5909  
 <211> 439  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-038-Q1-E1-D11  
 <400> 5909

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taccggtcca gaattcccgg gtcgacgggt acagaagaca gacaaagaaa atgccgggtg 60
gaaagcttgt tactttatca gatcaagata tattggagat ggttttcttc ccagtcgtta 120
atgaggcatg cagggtcatg gatgaaaatg tggatgatcag ggctgctgat cttgatattg 180
catctgtcct tgggatgggc tttcccaagt acaggggtgg cctcatcttc tgggctgata 240
cggttggagc atcctatata cattcaaagc ttagcaagtg ggctgaaatt tacggtgact 300
tcttcaaacc atcatcatatc ttggaggaga gagcgaaaag cggccgacca ctgggcgcgc 360
cgaagatggc tcagcaagct ccgacgaggt cacgcatgtg aggttcagca tatggcacgg 420
tttttgcttg aacagcatc 439
```

<210> 5910  
 <211> 462  
 <212> DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-038-Q1-E1-D2

<400>       5910

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cgccctgcatg  tacccggtcaa gaattcccga gtcgacgggg aactacatag cgcagactga   60
cagtctctcc  tctggcaaaa cataagatta nagcaacacg tgaagtacag aggtactcat  120
caagacttac  atcagaacta gctacatatg catcgggtatc aacaaggggg gtggtggagt  180
ttaactgcag  caagccagct ttgactcagt ggctaacctg aactacgact gcaagcaact  240
cttttgaggt  ggcgcacacg agtccacata ttcaccattc aatacaacac tatggaaccg  300
ctcccgctctc cctacgagaa ggccatccat agcactcaca cttatcttgc gagttttaga  360
ctatccactt  tcacttgtct atgaactatg caaggggtcc aagtttcaca tccgaagaat  420
ccggctattc  gaatagataa tgataaccct gcacgggtgt ac                               462
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<210>       5911

<211>       439

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-038-Q1-E1-D5

<400>       5911

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accggtccag  cattccccgg cgcacgggtc actctacttc gacgtgttgg tagcactacg   60
ttatgccatc  aaatctatcg tagacacata gaaagatcaa agaaatgtga gagaagaaca  120
tgaacgacat  gagaacacat gggaatgtga gacatccggg gtagtcgtgg aacgagttgt  180
cattctggca  cttgacggca ccaaactact agatatcgag agagcaagga tactgtggct  240
tcatttattt  tagctgatcg tatattcgca ttcactctgt ttgtcttttt gcaatccata  300
gctcgagagt  tcgaaactaa attctagggc acaagaccct attcttcctc cttttatggg  360
tgggcacgaa  taattttctaa ttctagcaca tcacaatcat aatcttctag catattcatt  420
gttggcattg  tgtcatccg                               439
```

<210>       5912

<211>       445

<212>       DNA

<213>       Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-D6

<400> 5912

accggtccag aattcccggg ccgactaagt actcaatctg tacctttata tagtgtgtgt 60  
ttcatcctga ctacaatacc aaggagtgtg gtggcatgtg tactttggat cctcataggt 120  
tgatcccctc caccaagtat gtccacatgc atgtgcccaa cgatggaaac ttcccaggca 180  
cacttccaac ccagccaggg gtattttcat ccaaaactcc aaccgtgcac tacattgtgg 240  
aactttgcta gaaaaataag gcgcactaca tagaggaatg gagggaataa ggtaacatgt 300  
gtttagacg acattaagtc ttggattatg tgttaagtct tcgaaaaata ttcttctat 360  
gcgccatggg ttctcaata tggcaacaca tacctgtac ctgcgtaga gctgatgtca 420  
cgcccgata attaagctac agtag 445

<210> 5913

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-D7

<400> 5913

ggtctagaat tccggggccg acgggttttg caaaaaaaaa ccctgccgtt ttctcgaatc 60  
aaccagagt acaacacaac acttgaatta attctgtctg aatcttcagt taactagaaa 120  
ttctagccac taaatcaagc tcacgtaagc gaccagctag ccctacgcaa cgctatcttc 180  
tccatcgttg tgtttagttc gtgcctgcgt tttagctgat ggatctttca cgttttgatg 240  
aagctgctgg acgaccgtg cgcccgctg aacaggcggc gcggccccgg cgtcgtgaca 300  
gccgcgtacg atttctcta cctgcccatg gatttcaggt gattcatttc atgctcgctc 360  
ttctctcacg gtttgacagg gtgatttctt gcctgcattt tttcttgatg cgtaccgaa 420  
cagaatagtc gcactatcat c 441

<210> 5914

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-D8

<400> 5914

taccggtcta gcattcccgg gtcgacgggg aacgtgatga ccatcttcga ggaggaaggc 60  
gggcggccgg acgccatcat gacctgacg gtgaagcgcg acaacatctg cagcttcac 120  
tcggagacca accccgggca cgtgcgggtcg tgggagacca aggacggcca gctgacgatg 180  
gtggcgacg acctgaagcc gcgggcggtg ctgacgtgcc cggagaagaa gatgatccag 240  
caggtggtgt tcgccagcta cgggaacccg ctggggatct gcggcaacta cacgtttggc 300  
aactgccaca cgccaaggc caaggagatt gtggagaagg cgtgcgtggg gaagaggagc 360  
tgcgtgctgg ccgtgtcgca cgaggtgtgc ggcggggacc tcaactgcc gggcaccacg 420  
gccacgctgg ccgtgcaggc 440

<210> 5915

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-E1

<400> 5915

attcccagat cgacggctgc aagaccaaga ctctgccgag gcctctccgc gccggcgccg 60  
gcatgcccac cacgtcaggc ccggtggtcg ccgaccttc ttcacccgag ccggaccacg 120  
atgacgcctt tccttcaccc gagccggacc cagatgacgc ccttccttca tccgagccgg 180  
accagatga tgcgggtccgt gcgtcgtcag aggcgcggga acatcaggcg atggggccac 240  
gtacaccgtt atcgagatc cacgtgctc ctccggcgtc tgcgtgacaa gaacacctca 300  
gcgtacggcc gtgacagtca gcattggccg accaatcgat atgtaagcg gatcaccagg 360  
tgcggaggga ttagcgcatg gccgcgtgct aatgggtgta cacgtattat ttat 414

<210> 5916

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-E1

<400> 5916

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gaaaagggca cgctcgtaaat ctgcgaggtt gtaatgtccc tcccgagcta acacattcat 120  
gacatacatg gattgcacga aacaggggaat ttgactagat gctgattatg tagcaaaacg 180  
atcacatctg cgtgtggaag taactgaaac tattgcatag aaaaccatgt ctcaactcgg 240  
gtcatgggac ggtagcgcta tacgatccac gcaaaagttg acgaccagcc aatttacaac 300  
accgactaaa gtgtaaggga aaggcattc 329

<210> 5917  
<211> 150  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-E7

<400> 5917

ttactactcc ctatagttag tcgtattaaa tctgcagtgt ctctgacggc ccaggtagca 60  
tttcttcggg acatatagac gtcctcgtag taagctttca aagtatgggg aactggcag 120  
cagatagtag gtaggaaaga ttgaagtacc 150

<210> 5918  
<211> 441  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-F10

<400> 5918

accggtccag cattcccggg tcgacggggc tctgtgagga taatgaccca atggacgtcc 60  
ttgtcctgat gcaggaacaa gttgttcctg gttgcttctt gcgtgcccggt gctattgggc 120  
ttatgcctat gattgaccag ggtgagaaag atgacaagat catagctgtg tgtgctgatg 180  
atcctgagta ccgtcacttc agagacatca gtgaacttcc cccgcatcgc cttcaggaga 240  
tccgtcgctt ctttgaagac tacaagaaga atgagaacaa ggagggttgca gtgaatgatt 300  
tcctcccagc agaagatgcc atcaacgcaa tcaagtactc gatggacctc tacggttcgt 360  
acatcatgga gggcttaagg aagtgatctc cagttgggtg actgcagatg ctacgctatc 420  
cgccctacgg cttatcaata g 441



<210> 5919  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-F12

<400> 5919

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ctcagcattc attcattcac tcaccgtggt atcacgaagc atcataatac gtcacgcgca 120
atgatggagc tggctgcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa acaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg gcgccttaaa 300
ggataaaagt ttaacaagcg ggaaatgaaa tcaaaaaact cttttaaggg ggccccaaaa 360
ttcaattaaa ggggcctttt tttaaaacag tagtatgggg aaaacccggg ggttacccaa 420
tttaaccccc ttggaaaaaa aaccctttt ccaaaggggg gg 462
```

<210> 5920  
 <211> 460  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-F2

<400> 5920

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cgccggcatg taccggtcaa gaattcncgg gtcgacgggg acgctgctga tgaagtccag 60
gctcgccgga tgcggttttg gctcaagctg cctccgcttg ttggctgcct tgccatccat 120
ctcaaccggc ggtgacggcg tgtacacatg tgctggtgtg tgttgtgtgc tgagtgtgcg 180
cgagtgcgtc cttctgtgca tgccactgcg cagtgtgtaa ttgtgtgoga gtgcatcctt 240
cacgcggaag aagtgtgtcc tcaatgcgcc ctcaatttac taacgtgcac ggtgatatct 300
actacgcaac cttctccttg tagacgttgt tgggcctcca agtgcaaaag tttgtaagac 360
agtagcaaat ttccctcaag tggatgacct aaggtttatc aatccgtggg aagtgtanga 420
ataagatggg ctatctcaaa caaccctgca accaaataac 460
```

<210> 5921

<211> 462  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-038-Q1-E1-F3

<400> 5921

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aatctcatgt aggcattcatc atacgtattc aagccagtcc ggaagggtcga tcccaatggg 120  
ggagaagggg tctaccggaa tggccgcact gctgtggatg ttgtgcaaaa tgatgggtgga 180  
tccggtcggg gatatgcaag ccaatcttca ttggcacoga cccagaccta tatataagac 240  
ggcgggcagc agagaaatta cgggatggaa atggaataac taagtactac ctgatcanac 300  
tccattactg acctgctcat cggacaatat ccgactacct ctcaacgtcg gcaactctag 360  
cggagtcaat gtgcaaccat ggccaaggag cgggtggactg ttcgaaggat tgtcccatag 420  
aagaaccttc tctcggagga cgtatggaag accaacaagc at 462

<210> 5922  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-F5

<400> 5922

agtaccgggc tagaattccc gggtcgacgg ggagaattgt cttatgaatt ctccaattg 60  
caatttttct gatagactag gagctatatc ttgcgaaac ataaaccgcc gcaaagtaag 120  
ctttcaagaa atggggacag tggcaccaaa tagtacttgg aaaacattga ggtaccagga 180  
tcagttcgtg cattcaccag caaggaaaag atattatcca taccaccccg agcattacta 240  
cagtccccac acaccagcta tgaggagtcc cctggcgcca agtaaaacgc ctttcacatc 300  
gacaaccgcg aggcgcaaga tgatcttctg gaccgaggca gaggaggtgg ctctgagggg 360  
ggcagtggcg aagtttgccc cgaatgggga ggccgcgaag gagaagaggt ccatctcgtg 420  
ggtgcgcata cacgagtact gc 442

<210> 5923  
<211> 438

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-038-Q1-E1-F6  
 <400> 5923

taccggtcta gaattcccgg gtcgacgggc tccgtttgat attgatttcc tgcgatgtaa 60  
 aaaactagca aaaaatagca actggcactt ggcaactgggt ccatagggtta gtcccaaaaa 120  
 atgatataaa gttgctataa aatgattgta aaacatccaa gaatgataaa ataacaggat 180  
 gaatacttca tatattatag atacgttgga gacatatcag catccccaag ctttaattcct 240  
 actcgtcctc gagtaggtaa atgataaaag aaataattta tgaagtgcga ttgctagcaa 300  
 agtgcataag tttgatcaat gataatttca attacttttc ctagcatcat aacaacaatt 360  
 ctttcttatg aaagtctca tggttatagta gcaaccaatt cacatgtaa ggttcaaaca 420  
 atgaattctc ttgaaact 438

<210> 5924  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-038-Q1-E1-F7  
 <400> 5924

taccggtcta gaattcccgg gtcgacgggg aatttcaagt ttcccctaga ttaaatttat 60  
 tttcttacca attgtccaag aaaaagctac aaaaagttag acctattcat cttttttgtc 120  
 caagccagtc tgagcctttg caattttctt ttcattgttt gcattattga attatcggtt 180  
 gcatcgtcgt gtcgagttgc tggctctagt gtctagttcg tttagagttt cgagttctgt 240  
 tcacattagt cacatgcgcg ctgcatcggt atcctttccg ctgtccacca ccccatccat 300  
 caatttccac cacgtgctac ccatagttca ttgtcacaat catagttgag gtcgttcaca 360  
 tcttcgcttg atccaatctg catcttatct agtttgtctt ggaaagaggg agagaaaaaa 420  
 agacag 426

<210> 5925  
 <211> 270  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-F8

<400> 5925

attactacac cctatagtga gtcgtattaa aatttatattt cctatcagtt gtccagaact 60  
gtgctatagg aagttataca tatgcatcat ttttgtccag accaatctga gccattgcaa 120  
gtttcttttc attgtatgca tgacagaatt atcgggttgca tcgtcatgtc ctgttgctgc 180  
tcttatgata tagctcgatt acaagttcct aattctgttc agactactca tatgttacag 240  
cagcatcgtg atcctttatg atgtgcaata 270

<210> 5926

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-G10

<400> 5926

accggtccag aattcccggg tcgacgggtg ggataagaat gtcgaaaggg aataccggta 60  
tttactacc atgactatac ccgacgcca gagagctacc gtgaacgtca ttgcaaaaat 120  
gagccatggg tacacgctaa gcatgtgaca caatgctttt tcataaccga cccaagcaat 180  
cccagccgtg ttgtcgtgag gagaggcaaa aggaacatca ttggaatgga tggagtctcc 240  
aacgaggagg actacgacca gtacggcaac cctatgaggg aagatgacga tgacgatgaa 300  
gtatacgtca aaagaagaat cagtactaca ttacctaaga aagatcatac tccatggaaa 360  
aggaaaagcc acaatgaagg 380

<210> 5927

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-G11

<400> 5927

cgggtccagaa ttcccgggtc gacagggatc atcaactttc ctttttacac tttttccttt 60  
ggcaagcact ttgtgttgga gtgataacct gcaagtatac gggatcgcaa cagttttcga 120  
aaagtaagag tgtcgaacct aacgaggagc taaaggtaga ataaatattc cctcaagttc 180

tatcgaccac cgatacaact ctacgcacgc ttgacgttcg ctttacctag aacaagtatg 240  
aaactagaag tactttgtag gtgtgatagg acagatttgc aagataataa agagcacgta 300  
aacataaact aggggctgtt tagataaaga agcaataaat tacatattag tagagagctt 360  
tttgttacga, gaaaagttat ttgtccaagg caatcgataa ctagaccgg 409

<210> 5928  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-G12  
<400> 5928

ttcccgggtc gacggggcta ttggtcagct tgcaaggctc ctgtgggaag ctgagaagtc 60  
ggggcactac cagtacttcc tctgtgtcac tggagaccac tctactcctg ttgagtacgg 120  
agaccacagc tttgaacctg tcccgtttgc aatatgccgt ctgagagatt tcgtgggagc 180  
gattggggag ggcaatgtga tgaatacccc ccttgacgat ttcccgtgc ctttggttaa 240  
atccggagaa gatttaactg atgattcaga accagcggaa cacaagcctg gggagcgtaa 300  
agcttttagc ggcgatacag tgtgtgaata caccgagatt gctgctgcaa ggggctgcct 360  
tgggcgggtc cctggaagtg agatgatggg catcatcaag aagttcatga aagcaaagaa 420  
cgattaac 428

<210> 5929  
<211> 444  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-G3  
<400> 5929

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gctaattctc gtctgacaaa gtctcgtcta ctactacact acttgattaa tcaaacaaaa 120  
aatataaaaa aatcaatacg aattaccgtg taaaatccaa cggatatagga gttagatgag 180  
acatagttat ttctcgagct agactagagc tagacacacc cctttactgt atatattctt 240  
tgggtgacgt tttgtttttg aagtctgatc ttactcagc tcaactattg gcatctgggt 300

gtgggccggt ttagtcattt ctctgccag tgtcaattta ctgttacctt taagccccggg 360  
 cccgtgtgat gaatggtagt gtatcctgga acctctctgt tgttcacatg catttttctt 420  
 gagatataaa tattgataaa cttt 444

<210> 5930  
 <211> 343  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-038-Q1-E1-G5  
 <400> 5930

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 gggcacttgg ttctaagacg cgtcctccga attgatcaat actactggcg agtggctgtt 120  
 gtcgttgttg ttgtaacctg taagtccacc attatgaagc ttctgcttgt ttacgtgtc 180  
 tgccttgtct atatgtgtaa ggctacaagg aacgaaatca atgtacatat gttacccta 240  
 tgttaaataa agcagggttt gccactctaa aaaaaataaa aaatataaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaataaaaat caatattcaa aaaaaacta aaa 343

<210> 5931  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-G6  
 <400> 5931

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 ctgatatcta tgctaagtct ggtggtgtga tcgttagcta ttttgagtgg gttcagaaca 120  
 ttcaaggatt catgtgggaa gaagaaaagg tgaacatgga gctccataag tacatgaaca 180  
 gcgcgttcca gaacatcaag gccatgtgca agtctcaaga ttgcaacctt aggatgggag 240  
 cattcacctt gggagtgaac cgggttgcgc gcgccaccat cttgaggggc tgggaggcat 300  
 gaggaattcc agattcctta tcgaataatc catgccccgac accgtggtgg atgacagtcc 360  
 ttatatccac catcattgat ttggtaaatt catcataagt tgccggcatg ccaggagtcc 420

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448

<210> 5932  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-G7  
  
<400> 5932

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acaatgcaaa catcaaatat gaattgggtt gcaacagtac ttagagtagc gatttgcttc 180  
attgtactaa tgatcttacc aaactttcta ttaagttttg tgtgattgat gttttcaagt 240  
tttcggagag atcacgatgg atgaaggaat aaggagtggc aagagcctaa gattggggat 300  
gcccgaggca caacaagtaa atattcaagg actcccaagc aaccaagctt ggggatgccc 360  
cggaaggcat tccctctttc ttctaacgat catcggtaat ttcacttgga gctatatttt 420  
attcgtcaca tgatatgcgt aaatc 445

<210> 5933  
<211> 429  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-H1  
  
<400> 5933

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gaaggacaag ctctgtacac acaggtatac tgtcatcgaa agaaagacag caaacacgta 120  
catatgacgt ctcaagcccc acggacaagc tctgtacggg cgaacctgag cgaaagatca 180  
gttatactgg agatggatca tctcgggtccc agaacccttg ctgacaattg tctcagcaca 240  
ccgatcgatg ttcttgccgt ctgtgactta tactgtactc gttgtgcccg tctgtttctg 300  
tatcctgcgc aagtataatg cgattttgga tggctcctta ttatacatgt gcaaaatatg 360  
gcatacttgg cgtcaacagg tgcacacac cagtcatagt tggtctttct ttgttgttgt 420  
ctcagctca 429

<210> 5934  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-H10

<400> 5934

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 gggccgcctg ggccaagaac aagcacgtgt atcagttctg atcgatcgcc gccgggcgcc 180  
 gcgcccggcc gtgcatctcg cggcagatgg tgttctgaac ggaaaaagtt cgcgagagat 240  
 gatggtgtgc atgtatccac cgctcaccgt cacttgaga ttcgtgctac gttttcttgt 300  
 tttgtcaaaa gcttgtcttg tttcagagtg ttgcatgatg tttctctttt taaaaattat 360  
 cgtgatgttt cgatgtgtat atcagtaaaa taagagagta ctgagttcaa ataaaaatta 420  
 aaattagaga gtactcgac 439

<210> 5935  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-H7

<400> 5935

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 gcactggaag ggcaaggaca ccgacgtgca ggtgagcgag tacctgcccc ggggtgtgtc 180  
 gtacatcaac gtgatgcggc ggagcaagtt ctgcctgtgc ccagcggtt acgaggtggc 240  
 cagccccagg gtggtggtgg aggccatcta cctcgagtgc gtgccggtgg tcattggcga 300  
 cgactacgtg ctgcccttca gcgacgtgct caactggccc gccttctcgg tcggggtcgc 360  
 catggcggac atacccaacc tcaagaccat cctcgccgcc atgtcgccgc ggcagtacat 420  
 acggatgcag cgccgggtga ggaccg 446

<210> 5936



<211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-038-Q1-E1-H9  
  
 <400> 5936

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acaagtgtta atttcactaa gtctgaaatc tgtttgcaa atgcattttt tccatgcttg  180
tttgaacctg ttaatggatg aattggccgt agctcagtgc tagacttttg ttaagcatca  240
tgaatggatt cttgccatgt attttgttgc catgtttggg tgtttagca tgttcatctt  300
gttgcattha gatggctact tgctgtaa atcgagaacgt ggtcatattg gaatcgcttg  360
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ctcatatttc cagtgggtaca c                                     441
  
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<210> 5937  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-B6  
  
 <400> 5937

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cggagtacga cctgtggggtc aacaccttct ccccgagggg gcggctgttc caggctcgagt  180
acgccattga ggccatcaag ttggggtcca ctgcaatcgg cttgatgact aaggatgggtg  240
ttgtactggc tgttgagaaa cgtgtcacct caccgctgct ggaaccaagc agtgtggaga  300
aatcatgga aattgatgag catgtcggct gtgccatgag tggccttatt gctgacgcca  360
gaacactggc tgagcatgct cgtgttgaga ctgagaatca taggttctca tatggggagc  420
caatgacag                                     429
  
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<210> 5938  
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<400> 5940

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aacaccgcta ttcattcatcg tcggacggta acctccatat catcttggtta tcgtggtaac 180  
cctccattgt atattcccct tgccattgca ttgttaacct ctagccatt ttgcgttact 240  
tgcctatcga gactagccat ttgagtattg ccggcaacgt tacttggtgca cattactgat 300  
catacttccc atagcataca taccatatca tcgtgggtgca tatattggta tcatatcttg 360  
tgtcacaagt ttgttcccgc atatacacia ttgctatctt ggtttggtgca ttgtgcaaag 420  
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<210> 5941

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-D6

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acaattccta gggtatggga ctggatctcc atttccaaga ttcttagctg ataagtatat 120  
tgtgcggaat aatctctact gaatgacaga tccaagcaat ctggatacgc catgggacaa 180  
agttgaagct ttgtacatca cttctctacc tgtttattaa tgtgtcttca tgtttggcag 240  
tgatctgggt ttccatgtac ttgatagatg cattccttat ctttatgtgt tccatctacg 300  
tagatgtgtt tctgcccata aatgtattta tgagcttgct ccgtttttac tgctttccta 360  
cgtcaatttg aaaagtaccc ttatttcacc taataagggc tatacatgca tttagacgag 420  
tgcacatttt ctataaacat aagcattgtc 450

<210> 5942

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-D8

<400> 5942

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 agacgggatt ccactatcga gacaagagcc ctctagcaa ttatgttgtc aatatttcgt 180  
 caaacatgca gatttttcca ccagaagatt ggctgatcgc gtcgtctgta ccatcaaagt 240  
 tttcaccaga tgctattcag aagggtgctaa atgaattgac tacagagaat gttagaatat 300  
 tctgggagtc aaaattatth gaagggcata cagactttac agaaccttgg tatggtacgt 360  
 catattgtgt tgaagcagtg cctccttcca ttatgcagaa atgggtagaa aatgctccca 420  
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<210> 5943  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-E1  
  
 <400> 5943

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 aaggcttgag gggtcagtac aacgggcaaa gctgtaataa tcacttggtg gtactttttt 120  
 cctggcattt ggtcctctga ttattgtcac ggtttctcta tttgctggtc tttatctgta 180  
 ttttgggcaa agctttgtac acgacgggag caagaaacca gtcgcgccac caccatacat 240  
 tgatccatat gagctactgg aagatgatag gatctcccg cctcccttg atgtgttctg 300  
 aatctccacg acaaaaagga tagtaatttg tagatagctc aaataatttt cttgttttac 360  
 tagatatgta cctgtaaattg caatagctgt anactgttat tatccggaaa t 411

<210> 5944  
 <211> 271  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-E10  
  
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tatgttgact atcgctatgt agagagggtta tatgctgaga gtgtacatta tgtgtcactc 120  
 actcgtgatg ttctggaatg acggttctgt cgtatcacag agttctgcgt cataagtatc 180  
 ctccgagtga gcctttaact gatcatagtt caggatgatgt tgatcttgaa agagctagac 240  
 actctgaaac gtcctaatag tgaaagggat g 271

<210> 5945  
 <211> 72  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-E3  
 <400> 5945

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 caaaattcaa tt 72

<210> 5946  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-E5  
 <400> 5946

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 tgtcacctaa gacggaggac gtgctgaacg acctggacgc tgcagatcaa catggacatg 120  
 gacttttcac tttctagagt aacacactga catggcatag tagtaggcga cggttctttc 180  
 attataacgg cttataatta tcatcagact catactatta tgcaaagtct tcctatgatt 240  
 tcattgggta aattgtataa ttgtgacagg ttcatatatc aatgtcaaga aagagctgag 300  
 caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacggccgct ctaaaggatc caagc 355

<210> 5947  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-E6  
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taacatgcat gtgcttgctg ctctacttg caattattat gagagaggaa ctacatctcc 180  
acctctttat gtttccaaca cgataaaatt gcaagaaact gcttatgcta tgtattgtcc 240  
tttacttgat gtgcatgaat tggtctttta tgatatgctg atgcataggc agagagttag 300  
acttcgtcat tgcattgatg actttgcttt gtgctcataa ctaaatgaca aatcattgtt 360  
aattaaaatt ggctttgaca taccttgga tccgggtgga ttcgttactt gagcacttta 420  
tgcctagctt aatggcctta aagaa 445

<210> 5948  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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aaattgctag tctctcatgc ttcaattata tctttttgag agtcttttat aacagcatgg 120  
tattttctat ggttataaat tggctcctaga atggtaggca tccaagttgg gtataataaa 180  
aactatcata ggaagtgaat tggatgctat gatcaatttg atacttgata attgttttaa 240  
gatatggagg tagtgatatt aaagtcatgc tagttgggtg attatgaatt taaagaatgc 300  
ttgtgttgaa gtttaggaagt cccgtagcat gcacgtatgg ttaaagttgt gtaacaaatt 360  
tgaaacagga agtgtacctg gcttgtgcat ccttatgact ggcggtcggg gacgagtgat 420  
ggtcttttcc tacantctac cccctagga g 451

<210> 5949  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-E8  
<400> 5949

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ccagttttcc tagattagat ttattttctt acctattgtc caagaaaaat ccacaaaaaa 120  
gagttagatc gattcatcct tgggtccaagc cagtctgagc ctttgcaatt ttcttttcat 180  
tgcttgcata gttgaattat cgggttgcatc gtcgtgtcga gttgctggtc ttagtgtcta 240  
gttccttttag agttttgagt tctgttcaca ttagtcacgc agccgctgca tcattatccc 300  
atctgctgtc caccacccca tccatgaatt tccaccatgt gttacgcact gtttattgtc 360  
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gtcttggaag gagggagata aagaag 446

<210> 5950  
<211> 469  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-F11  
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gtgcttatga gatttcctgt tgagttttgt gttgtgaatt tttcaagttt tgggtaaaga 180  
tttgatggac tatggaataa ggagtggcaa gagcctaatac ttgggggatgc ccatggaacc 240  
ccaagatatt caagaatagc caaaggccta agcttgggga tgccccggga aggcaccccc 300  
tctttcgtct tgggttatcg ataactttac ttggagctat atttttattc gccacatgat 360  
atgtgttttg cttggagcgt cttgtatgat attagtaatt tccttttagt ttaccacaat 420  
catccttggg gtacacacct tttgggagaa atccacttga ttggaattt 469

<210> 5951  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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 aaaataggtc attgatgcat ggtggccgtc ggagagtacc tcataataaa ggaaaataat 180  
 tccgtctttg aaccaaagct aaattatcgt atttcggatt gacgtaaaca taaggaaata 240  
 gtcggtatct gaaagtacca ttcttctccc gagctcaaat gcacttgtca tgaacagtan 300  
 aaaaataaaa attaagttaa aatataaaat tttctgattt ttcttgacag taaacattgt 360  
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 aacaaagctc caacat 436

<210> 5952  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-F4  
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 acttatcaaa aacacaaaca actttgtatg gtgccttgca ttgttcatac aaggatcatga 180  
 acttttgagg gggggggggg attttaaaag atgtcaagaa acaaagtgtc ctcagactga 240  
 gtcttctggc ctacccggac accctccgtt gaatattagc tattttttaga cattactaaa 300  
 atgatcccaa cttttacaag cagggtgggca tgtccatggt aagcaccaat gtgaggtttg 360  
 aacgatatct gacacgtct gtaagttgag atagtttagc catttatcac cattttgata 420  
 gagaaaactc cagagaatg 439

<210> 5953  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-F7  
 <400> 5953

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gtatcttctg acatggactc caagtctcca ggatgataat cttccaaaaa aatcacgttg 180  
 ctgaagggttt cattccgttt ggactccgtt tgatattcct tttcttcgaa atactgaaac 240  
 atgcaataaa acagcaatat ggttgggcct ccggttaata ggtagtcca aaagtaatat 300  
 aaaagtgtat aataaagccc ataatcattc aaaacagata ataaaatagc atgaatgctt 360  
 cataaattat agatacgttg gagacgtatc aaacaatcaa aaattataga t 411

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 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-F8  
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 cagagctgag acctgatcga tggcacatat tagtacgtag atcagtactc ctgctcacac 180  
 aagtccagta atgagatgcc tcggttgctt cgcttcaaaa aaaacaaaca acaaaaaaaaa 240  
 aaaaaagat gaaaaaaagg taaaaaagtt aaaaaagga ataataaaaa aatgtaaaat 300  
 aaagccacaa taatcattca aaatagacgg ttcagctagc atgaatgctt cagtcgatta 360  
 tagatacctt ggagacctag cacacaatca ggtattacag atacgacggt aacgtatcag 420  
 catcccaaaa g 431

<210> 5955  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-G5  
 <400> 5955

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 tgtggagcct gcagctgggtg gagagcagac tgtcattgag gctgatgttg tccttgtatc 120  
 tgctggcaga gtcccataca ctgctggtat tgggctggac gccattgggtg ttgagacaga 180  
 caagggcgga agggtccttg ttgacaatcg ctttatgaca aatgttaagg gcgtatacgc 240

gattggagat gcgatacctg gaccgatgct tgcacacaag gctgaggagg atggtgttgc 300  
atgtgttgaa tttatcgcg ggaaggaggg ccatgttgac tatgacactg tacctggcgt 360  
ggtgtacaca caccagagg tggcctccgt tggcaagacg gaggaacaag tcaaggcatc 420  
tggtgtagcc tac 433

<210> 5956  
<211> 457  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-G6  
<400> 5956

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agaagaaaca ggcagggttta caatgttttg tggtgcacat tgctactttg gtaccttgat 180  
gcgaagtaat aatgtcttta agctttatta gcaccggaat aacagcaaca aaagacagtt 240  
tttaccactg cacttgacaga gttctctgaa cttctgataa ccagacatca gggttctcta 300  
aaagaacaga cattagctaa cataattcag cacaagaata acagttcaaa atgccaaaag 360  
agtattagta caccataagc aagtgttggtg tcgttagcag cgtcgaagtt tctatttctg 420  
aacttgacaga acttcattgt catgtaattc agattga 457

<210> 5957  
<211> 453  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-G7  
<400> 5957

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ttgaactttt cttacccgag gaatatccga tggctgctcc taaagtagg tttctcacia 180  
aaatatacca tcccaacatt gacaagcttg gtagaatatg cctcgacatc ctaaaggaca 240  
agtggagtcc agctcttcag atacgcactg ttcttctgag cattcaggca ctgctgagcg 300

ccccaacc agatgaccc ctctcagaaa acgtcgcaaa aactggaaa tccaatgaag 360  
ctgaagctgt tgagacagcg aaggaatgga ctggtatgta tgccagtggc gcatgacagg 420  
ctaacgctgt tatggatgta ataactgt gtc 453

<210> 5958  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-039-Q1-E1-G8  
<400> 5958

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cgcagattgt ctccgcatg gcaaggcggg ttctctctcc gaatacttca tagaagattt 180  
tgaacacgag gatcgtgtct ggctctgcaa aacaagttcc acatacaacc gtagagagaa 240  
taatattttc acaaattctaa tctgccgacg cattctgcag tgtgacatca caccacagcc 300  
aggttaccat tcaaactggt ttccacaacc aacctcagcg tgtttcgga ggcggtttcc 360  
ttggcacgtc ttgtcgaagc agagatcgtg tcccttatt acgggattcc tatcaatacg 420  
gacatgggta acccaaccgc gccatcaatt actgtcacat ccct 464

<210> 5959  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 5959

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ccagctcaag acgcatcgcc agctcttcca gccgcaggag attgagggcg gcatgatga 180  
tgaggaagag gcggtcctcg gctttgggag cgcgctcttc tggctcatcc tcatgacct 240  
cataatcgcc gtgctctccg agtacgttgt cggcaccatc gagccgacct cgcagtcgtg 300

gggtctctcg gtgagcttca tcagcatcat cctgctcccc atcgttggtgta acgcggcgga 360  
gcacgccgga gccgtgatct tcgccctgaa gaac 394

<210> 5960  
<211> 444  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-039-Q1-E1-H11  
  
<400> 5960

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gccgcccgt cagccgcctg ctgaaccgcc cgctctgcct ctgggcgtgt cctgtcctga 120  
tcaaccaagt taggggctcc atcacgcgtc gggatcatgcc cgcacggttg gtcacggcgc 180  
cgggcgttgc ttgaaactgc agccgagtc atatgcctgc tatagctcgg gtcgccgctt 240  
gggcgagggg tcgaatgaat cctgtctcga ctataagaat atgcttctg ctgtgccaga 300  
gccgtctgaa gaagttctgt gacccttcgc gtttcgaccg ctgtcggaga gtcgccttcc 360  
actgggagag ccgccaatcg tgccgccgca gcaatcatgt tctccaacgg gttagaataa 420  
tgaccgggag gtgtcggtac atac 444

<210> 5961  
<211> 372  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-039-Q1-E1-H5  
  
<400> 5961

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cagaatacat gcgacagctg aacaatcatc tgggtcaaatt gttcgccgtg ttgtgtgagc 120  
atatagcact tgtggccact ttgtcatgac tccagcacat gctgagagtt tgatgctaca 180  
acaatttata tgagactaca tggtacaata cttcagtact atcgacttat tatgagattg 240  
attcagttga cactaaaaac taggttggtt aatgttgcca aaattactgg atatggctcg 300  
tggaattca aggatcgcct ttattcatat gtaatcatca tctccgtgaa tgcaagagca 360  
attgtgaatg tc 372

<210> 5962  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-H6  
  
 <400> 5962

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 tactttctcgt ctggatagtg tactcaacgc cacacaatac tataccgtat gcaagcctgc 120  
 aggtagctag ctagcctgag agagacagac cgaatccgac agatatctca gaagaatttt 180  
 ctttacgtgc ccaatatcaa tatgggctct gaaatgaggg taggggcgcg tttgttacct 240  
 gcatcgtttt ttgccacttt gcatacttgt cccaactggg cctggctgag catatacagg 300  
 ataaaaacca acatctgcat gttgattggt tacctgcatc ncctccagcc taaacgtgct 360  
 aaaacgaaag gcctgatgtt tgcttgcgga ctttgtttga ggggaaacac angtcggtt 420  
 gtttggttat gtacaggaca gttgtgtggt aacctccta 459

<210> 5963  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-H7  
  
 <400> 5963

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 agacagtatt taccaggggtg gtgtgtggaa ggtcaggggtt gaactcaccg aagcttacct 120  
 ttacaaatcc ctttccattg gtttcaccaa caagatctat caccccaatg tcgatgagat 180  
 gtctggttct gtctgcttgg atgtgatcaa tcagacatgg agcccgatgt ttgaccttgt 240  
 gaatatcttt gaggtgttcc tgccccagct tctcctgtac ccgaaccctt cggacccctt 300  
 gaacggcgag gcggcttcgc tcatgatgcy cgacaagaat gcctatgaaa ataaagtcaa 360  
 agaattattgt gagagatatg ccaagcctga agatatatcc cc 402

<210> 5964

<211> 368  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A1

<400> 5964

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 gttcattgta cttagttaag ttgatgttac tgttggtttt tctcgctgcc gccatgccat 180  
 gagcaggcga ggcaggcagc ttctcaaact tgtgttggtg taacttgat gatgggagct 240  
 taagtacatt actttgtttc gaaaaaaaaa aagagaagag aaaaaaaaaa agcggccgcc 300  
 caaaaggttc cagccttact tagccttgca tgcaacttca tagcccttca aaagtgtccc 360  
 ccaaattc 368

<210> 5965  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A3

<400> 5965

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 ttcctacaac caataaatt aaatgcatcg gaaatgccgc cttegtcttt ttccatctgg 120  
 aggggtgccc aaccatcttg tgcctaataa agtatacatg cgtagcttag gcacgcgttt 180  
 agtctgtaag ttgcattgtc atcaacatca aaacacttaa ggaggaaaat gcccttcag 240  
 taatgtgcct tgtaggcct ttggcgttgg aaccaagtc cccacctata tttcaagata 300  
 aagcatgctt atgtttaatt cgtgacaaat atgtgttttc aaattaacgc aacaaaaaga 360  
 atgttcaata aaagactaga tgcttttctt cacagcttct tatgccatt ggtccatcaa 420  
 tttaccttgt ccaat 435

<210> 5966  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A6

<400> 5966

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gactaatgat caacatttaa cttgacaatg cgtatTTTTT ttagaagaac agggaggctc 120  
ctccccggtt ccattatcaa atgaaaccta aagtgtctta catcagctca ctgagaggag 180  
cagttcaaag gaaggactgc ggcgaaaccg actcaagttt aatgacaagc ttacagaatc 240  
aaaagcggca aagacacggg ccataagcgc ccacacacgc actacatggt ttctaagtgc 300  
acttgataat gcgtatgtcc aggtgaacct ccttgagacc cccgtgcacc gagtcgggtg 360  
gtaaaggatg gaattgatgc catgtgtttt ccaagtccac attggcggga taatc 415

<210> 5967

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A9

<400> 5967

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ggttatccac ttgagggaaa tttgctactg tcctacaaac ccttgcaact gcaggcccaa 120  
caacgtctac aagaagaagg ttgtgtagta gacatcaagc tcttttctgg cgccgttgct 180  
ggggagggtga gtgcttgaag gtatatcttt agatcttgca atcgaatctt tttgtttctt 240  
gttttatcac tagtttagtt tataaaagaa aattacaaaa aaaatggagt taagtttgct 300  
tcatacgctt tgtcttttta atatctttcg tgagtttgat ggaaaggaaa attgtgctca 360  
agtt 364

<210> 5968

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-B7

<400> 5968

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ttcttctctcg tcggtgctgc tggttgcggc ggtggtggcc gctgtggtgt gcggcgcgca 120  
 cggcatcccc aaggttcccc ctggcccaaa catcacggcg tcgectgcga gctacggcaa 180  
 caagtggctg gacgccaaga ccacgtggta cggcaagccg acgggcgccg ggcccaagga 240  
 caacggcggc gcctgcggtt acaaggaggt ggacaaggcc cccttcacg gcatgacctc 300  
 ctgcggaac atccccatct tcaaggatgg ccgcggtgc ggctcctgct ttgagctcaa 360  
 gttgcacaag cccggggcct gc 382

<210> 5969  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-B8  
 <400> 5969

attcccgggt cgacggggtc cattagtttc gggcccaatg cgtggtagta gctgaatcat 60  
 ggatcacaaa cacagaactc agttcctgag gacggctgca atgagacaac ccaccatgta 120  
 ctctacatg gcctctcacc gctaccttta ccaaaacgtg ttcacacact tagctcacac 180  
 atagtaggac atgttcacac gcctctgatt catccccgat gaatcagacc tgactcaact 240  
 ctaagcagta gcaggcagga caaacaaca tgaatgagta ggcacatcag ggctcaaaca 300  
 actctactc atgctagtgg gtttcatcta tttactgtgg caatgacagg tcatgcaaag 360  
 gacaaagggg ttcagctacc gc 382

<210> 5970  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-C6  
 <400> 5970

attcccgggt cgacgggctg aactacgtac ttaagtagtc attgtcggtg gtaccttaag 60  
 gtggtggttt gttttcttat actaacggag ctcatgagat tttctgttga agttttgtgt 120  
 tgtgaagttt tcaagttttt gggtaaagat ttgatggatt ttggctgaac ttcgtactta 180  
 agtagtcacg gtcggtggta ccttaagggt gtggtttgtt ttcttataact aacggagctc 240



atgagatttt ctgttgaagt tttgtgtgt gaagttttca agtttttggg taaagatttg 300  
atggattttg gaataaggag tggaaagagc ctaatcttgg ggatgcccaa ggtaccccaa 360  
ggtaaaattc aaggacaacc aaaagcctaa gcttggggaa tgcccggaaa gcatccctc 420  
tttcgt 426

<210> 5971  
<211> 415  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-040-Q1-E1-C8  
<400> 5971

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aggctgcttt ggagaacggc gggtcgtcgt gcatgaatct ggacaagctg gtccaatccg 120  
tcgtctgaaa attagcgcag catgtcggcc cagaataaat tctgctgctt tcgttcattg 180  
atggacatat tggggccggt tcttgcttga ttggaagatc aagactatgt tgcaactgtt 240  
gtttagctgc aactgtgtct catgccaaact cagtctacaa gtctcttgtt tagcgtgcc 300  
tgctcgtaa aaaaagataa cgaagccggc aggtgctcta ccatttgaat aaggaaagtc 360  
tagagaatgt ttacaagata gctgcttcga gaaccgacag aaaaatcaca caaag 415

<210> 5972  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-040-Q1-E1-D1  
<400> 5972

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gctccgtact tcgagcaata caagaatatt ttacgctcgg acaaccggg gaagcctgaa 120  
tcctggatta gaaaggccca catggagact ttcggcagtt ggttgcgaaa acatttaatg 180  
aatgacaatg atgttgaga tcagctgtac atgttggcca agaaaccatc ttcgactata 240  
acgactttcc aagggtacga gataaatggg aatacathtt acaccatcgc ccaagataaa 300  
aagagcacca accaaaacag tgggtgtccgc tttgatgcag caaccgagaa tgggcaaaag 360

gtcacatatt atgggttacat anaggagata tgggaacttg actatggacc ctcc 414

<210> 5973  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-D7  
 <400> 5973

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 ttgtgtgatt tgggtgctag tgtttccacg attccaaaac attgtgtgat ttgctaggat 120  
 tccgtgaatt tgatgattgt tctttaaact tgcaccttgc ggattccact attaagaaac 180  
 ctatggaaag aaataatgat gttcttattt ttgcatatag gaactatgtg cccgtagatt 240  
 ccattgttcc tgacatagat tgcaatcctt catgtcctat tattcttggg agacctttcc 300  
 ttagaacgat tgctgcaatt attgatatga aggaagggaa tattagattc caaattccat 360  
 taaggaaagg tatggaacac tttcctagaa agaaaattaa attaccatat gaat 414

<210> 5974  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-E11  
 <400> 5974

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 cgaagatgag gagcatattg cttctctgag gcctaaaaga tcaaagagac tagtgaggag 120  
 cacgggtgag gataaggaac ccgttgctgc ttgtgatggt gagaaacctg cagatgcagc 180  
 tgaaaacaat gacaacaatg atgcagaaga gttgcaatcc cagactcctt cagcctagtt 240  
 gacctactgg gttgacctga tgaaaacata agatgcgaat ggcaagactc taatttgtgg 300  
 tgttgagtag gagcatcaaa gatggcacc attggaggag ctctggatct gcttaagggtg 360  
 ttacgcagtt caataagtat ttttaactgtg ctgtgcaacc tcttttcaaa agcctgggac 420  
 cgcaac 426

<210> 5975  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-E12  
  
 <400> 5975

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 agcattaagt ctgccctcaa tgggtggatca agcctggcat tcacatctgc catcctggac 120  
 gttggtggta atactaccag agtggacatt ggccaagcgt accatgcata cacaacggaa 180  
 taagaagccc gagcctgcgc attgaccaac gttgtttacg tgtagcacac atcatgcaaa 240  
 ccagctcggg gaatTTTTga gctgatgcgt gctgttatgt ctgttttgct gatgcaccta 300  
 gttcctttgc aaagctgtag taacttgttt tgctcgaggg caatacaaca agacctggaa 360  
 taaatatctt gttttatttt g 381

<210> 5976  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-E8  
  
 <400> 5976

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 gtgaggatcc gcattagaag gctttgcaag gccttggaag aggatgcttt caggccagtg 120  
 ctgcaccact atgatgggtcc taaattccgc ctcgagctct ccatagcaga gacactgtca 180  
 ctgctagacc tgtgcaagac agaagacgcc tgatctgctt cggaacatgt ttgtggttgc 240  
 tctgtggttc tttttagtaa atatcatccc tgtaagttgt ggaagatgtt ttcacaatga 300  
 tctgtcccggt ccgtcgtcca tgaaagcgca agctgttggt tgggtggtgc atttccccca 360  
 gaaaggacct ggtactcgga agaagtaggc ctctaaagat gtgagcctg 409

<210> 5977  
 <211> 366  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-F11

<400> 5977

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ctagttcatc tccttgatac aatgctgcat acgtaagtaa aaatattgag tgaacaatgt 180  
gctgcattga gaaatctgag taattaagta aaaataagta gcaaaagtat cctgtaatcg 240  
actacataat catctgtacg tgtgcagacg atatgcaacg aaccgtcaag cagtgcctcg 300  
cccacgtacg tacaggtct cataacatg gcgtacgtgc atgactcgtc cggccgggcg 360  
acagcc 366

<210> 5978

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-F2

<400> 5978

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tgcaatggac gttgcagctg ctcgagtaat gaaatatatg gagaccatgc gtgccaaagg 120  
attgaaagac tatagttaca acgagttgca acaaacaag gaaagagaac tgcatctgat 180  
tggtttgtta ggacaaagaa aaagaaatca aagaacaggc tctgaagatt agagaactta 240  
gcaaagactt tgcagactac ttatatcagg ttaaaagcac ttcttctgag attcaccgcc 300  
cagctaaagg aagtgtatgc tcagccaatt ccataagtgg ttgcgagctc caciaagcgg 360  
ctatagatat tcataatgca attgctcatc ttggccagtt gagtgaaaac cctatgcaag 420  
gtaacaaaaa cacatcggtat tatcca 446

<210> 5979

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-F5

<400> 5979

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ccttctctgta tgtgggtctcc agtaccacct cttgagttaa aaggcgtgaa tgctgatgca 120  
 cttgatgcaa atgctgggtt tgttactttt gttgttttcc ctccggcatgt tgagggtaga 180  
 aagctagaca aaacagtttg gagtttggtta acctccatg cttatgtaag ctaccatgta 240  
 aagtgttctg aaggattcat gcacaccagg atgaggcgta gagttgagtc tctgatccag 300  
 gctttggacc gtgctaaatc cgatgcagag aagctgaaga agttggtaca tggcgggtct 360  
 tttaggagac tgagcatgaa gcacgaaggc aactctaact actgaaggaa gactcaggca 420  
 aatatatgaa agttttg 437

<210> 5980  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-F9  
 <400> 5980

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 tggacgcgac caatggcaga aaccgcagcg atagcaccac caccacaacc aatggcacca 120  
 ccgcaaccag tggaggaaaa cgcaacggcg gcaccgtcac aaccaatggc accaccgcaa 180  
 ccaatggcgg aaaacgcaac ggcagcacca ccgcaaccaa tggcgggaaag cgcaactgtc 240  
 gttgtgggtg tgccaccacc accgccagac ggcaccacga cattcctctg cctcatcctc 300  
 gccttcttca tccctccoct cggcggttttc ctcaagtaca aatgtgagat tgaattctgg 360  
 atctgcctca tcctaacatt cttggcctac gcgccgggca tcatccaagc cgtccgggtg 420  
 atcgtgaagt 430

<210> 5981  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-G1  
 <400> 5981

gggtcgaggg cgaatcgaaa gaacaaaaga gcttgcgcaa gaacacgtta accttgcggt 60  
 caaagccatc gaatctctcc cagacagtga cgatgaagat gttctgattt caaggcgcg 120

tcttattgat atcacacaga gagtcatcac aaggacaaaa tagcatgatt atacacaggg 180  
 tggagaagat aaggcggagt ttcaccacag gtgtagtggt ccgcttgga atttttgggc 240  
 gccttgggtca ttgcattctt tccattgccc gggttttgtg taacatttga tgagacttca 300  
 gggtaaccat tcttggaat catcctaagt cgcagctgta gtggtttttag ttactgggtgg 360  
 cagcaaaatc tgtgtattaa tatcacgatt ggcgattgca cgaagacctg accataagac 420  
 tgttaccttt ataatcca 438

<210> 5982  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-H11  
 <400> 5982

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 taaaaaatac tcaaaatttt ataataccac cgttacttta actataagaa aaatggctat 120  
 ttgtatcaaa tcctaacatt aaacattaaa aatagacggg cgcagcaacg ccgccatcgg 180  
 tgatctagtt gtgcactaaa ctactccaat ttccatctta tgggagaatt tcaagctaga 240  
 ctcttgctat atgcagattt tgtcttccag gttatggata tcacattgca tgtattcacc 300  
 gttgtgggtgt catctaata tacttttctaa ctatatatac atcattgaca gttcatatct 360  
 tcagttgtgc aatattttac acacaacttg tcttctatt gcgggaaaca ccaatatatc 420  
 ttggcaaagc tggactgaga atga 444

<210> 5983  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-H5  
 <400> 5983

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 atacaactag tagatactg caccgcacaa catcgtagga acaaaaaacg ggaagatctt 180

gttttgggtg atttatcttt ttttcaatca acgtagtatg aataatatga tgtggggggc 240  
 acccatgaag cttatgtggc ttggttgcac ggctacgaaa ggtagagaa aaataaatag 300  
 ataatgtgtt tagagtgcac tccactaaat agatacactt tggatccatt gcaacagacc 360  
 ggcacatcta tatctatacc ccctataaag tgtgtgaaaa a 401

<210> 5984  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-H7  
 <400> 5984

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 cgatggctct cccggcgtcc ggctccaccc tctcccgctt cctctcctcc cgccgcatcc 180  
 agcccacgga catcaccgcc ctcgccacct ggggcgtctt cgccggcagc gccgccatct 240  
 acctcgcca gccattcgac tggatcaaga agaccttctt tgagaagccc gagccagagg 300  
 catgagtgtc atacatggca acttttgatg cctacatttt caggacgatt ctctgagttt 360  
 ggatgacca gccataata tacaagacct tcgtgttccc ttgtttgatt tcccatcca 419

<210> 5985  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-A1  
 <400> 5985

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 ataatgcccg gctttgctac acacacggaa taatacggag ttttacgggc ctggacgccc 180  
 accccaccag ttaaaatcag ggggggcggg taagtaggtg gagaagtta cttttgcaa 240  
 ttacaacact aaaggtcagc gcgtccgtaa aacttgtgog tgtgcggcac gtgtgtctag 300  
 catttttgcg ataatgcctg tgtcctgaag tcgcacaagc cttgcttcca agcaacatca 360

cgagtactga acacctttcc t

381

<210> 5986

<211> 87

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-A10

<400> 5986

ccctatagtg agtcgtatta cgcaggcagg tatgttctgg tcaactgccgg ctgcgcgatt 60

tccgacgacg gcaatcgatt ggagtcc 87

<210> 5987

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-A12

<400> 5987

ggctctagaat tcccgggtcg acgggattat atgtggccaa gttcccagga aaaataataa 60

acttgtaata cgacaattat tttaaaaaag tgttctcaga aacgagctat cacgtgtgga 120

gatcaatggc tttcaggcga aatgatcaat cttatggcca cattcatggc atagtttggt 180

cagatgatct catattgtgc acaagggtgc atattggaat ggcaaacaat gttgcctaag 240

gaagttttca ttttgtttg acgaaaaaac cattttccat tcttcgagtg cccaaaagga 300

ggtttttttg tgaaggacct cccaaataat tgttgcataa ttgtaccaa tcatttttct 360

aaaatactag tccatattta atgcacaatt aacaaaaatg gttgggtgta aaatgttttg 420

atccacctct cgtgaaaaag acaaatttcc gcc 453

<210> 5988

<211> 286

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-A6

<400> 5988

tcgtgggtcg atacgggtcc ctatagttag tcgtattagt tgttcttgta catgcattcg 60



ccgtgtcagc agccaggcga cgcggagggg atgaaggga tacagagaac atgtttctgt 120  
ctaggtcatc ctgcttactt aggggaggtg gatggcccga cagaaggcat gcacatattg 180  
acgagggccg agactaattt gttaacggtt atttttaagg tttattgtct gtttatttct 240  
attttacaac ctgaatgaca aatgggacac aactgtaac agaaca 286

<210> 5989  
<211> 379  
<212> DNA  
<213> *Triticum aestivum*

<223> Clone ID: LIB104-041-Q1-E1-A8

<400> 5989

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acgtgcccag cgagatgcag agagaagcac aatcaatcga gtgactcaaa ctatgtgccg 120  
ttgatgaaca ggaaagggtt taaaaacaca ttctgaatta catagaaact tgtaggctgc 180  
atctgtatca tggatttgtga tccccttatt ttcgttgttt tggatctgtg cacatacacc 240  
ctacacctat actgttggtt tgctgttgcc acattcttat ttgttcgatt acctggacag 300  
tgttctgtta tttgtatata caccagcata tgctgaagga caaacggatt ccaaaaaata 360  
aatcgtgca taataaaac 379

<210> 5990  
<211> 386  
<212> DNA  
<213> *Triticum aestivum*

<223> Clone ID: LIB104-041-Q1-E1-B12

<400> 5990

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ctcagtagaa cgataacctc tgtgcacagt gatgtttcag tttctacatt gatggtttca 180  
agcataagaa ggtttcaaaa ttaaatgagc cttgtacagg actgataaca aattatgctt 240  
tctgagtttc aagctactga aagtaattga agctttgctt tcgctatgta agaatgggtg 300  
catgtgttaa ttagtggtgc acattttttg agactgtcca aaattctatt ataaaatgct 360

tatatgaaaa aaacggaaca aaaacg

386

<210> 5991

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-B2

<400> 5991

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ccggtgggca tattttcac agggaatcgt gcttccacca gtctggggat tccaagagga 120

aagtgaaccc gacgcactac cgggagccga ggttctacac caaggtgttt aaggaatgcc 180

actcctatga ccaagagggg aattcctttg agctttctct ggtaacttcc aagtgcattg 240

gagcttatgt gaaaagcaag aagaaccaga accagatatg ttggctgtgg gagaggggtca 300

agtgcacaga agacaaaggc tttcagagat tcttgacaa tgtgcagtac aaatccactg 360

gaatcttgcg ttatgagcgc gtgtttgggg aggattatgt tagcaccggg ggattcgaga 420

ccacaaaggg attttgtgga caa 443

<210> 5992

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-B4

<400> 5992

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attagcatgt ttgagttttg catgtagtct agtctagtgt ggcgttcgtc cgacgaaggc 120

ttcaggtgag cgcgccaagg aggtgagatg ccaggatgcc gtgtgaggcg gcgagcacgg 180

cgagatgccg atggtgctgc gtgagaagcg gcaagacgta tcagaggctg gagccgtgat 240

ggactgcac aaattgggtc ggggtgaaccg gccggtcgtt ctgtttgttg gactagctgt 300

tcatgcgtga gttcgtttag tcttagccga gagtgtcgtt gctagtagtt tatgcatgca 360

tgtagttggc ctggtcacaa gtggttaccg agtcgtgttc aacg 404

<210> 5993  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-B7

<400> 5993

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 aaccgtctgc tgcgccctcc atgacggggc tgaaatggca ccttcagaag cagcactgcc 120  
 gctactcggc atggttctgt acatatctct gtcgattcga acaacgcacc aggggtgctca 180  
 gctatatattt cagcgcagtg gcggctcgag gacaggcggg ttttaagattt gatttgctgt 240  
 aatgctacga ccaagtgtaa caatgtactt atatgcactg caacctttgg aggctgcgca 300  
 cagggtgattt gtatggttgc ttacattggt ggatatttaa ttgtgcacaa cctaaatatt 360  
 atgcacacat cgccattggt tccgcttggt aaatgcgacc cataaatgtg ttccaaaaaa 420  
 caaactcctt actggga 437

<210> 5994  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-C12

<400> 5994

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 tgcttcactt atattatttt gggagttatt tagaacaaca tggtaatttg ctttggctat 120  
 aaaattagtc ctaatatgat aggcattcaa gatgggtata ataaaaactt tcatatagag 180  
 tgtattgaat actatgagaa gtttgatact tgattattgt tttgagatat gaagatggta 240  
 atattagagt catgctagtt gagtaattgt gaatttgaga aatacttgtg ttaaagtttg 300  
 caagtcccgt agcatgcacg tatggtaacc gttgtgtaac aaatttgaaa catgagttgt 360  
 tctttgattg tcatccttat gaggggcggg cggggacgag cgatggtctt ttcctaccaa 420  
 tctgtccccc t 431

<210> 5995  
 <211> 358

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C2  
 <400> 5995  
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 tttcagggat ttttgcagtg ggattttagt ggtactatgc tgcgctgtgt ttgggatttg 120  
 aaataaaacg atgggagatg tgccacgctc ttaaattgcca gtcttctgct ctaatcttgc 180  
 taaattactt gttgcatttt gcagcttgtc tacctttaca gtgactacct tcttttggtc 240  
 gtgctcattt ggcaaaacag tttgtctaatt tcacatctac ttogtgtctt tttagacatt 300  
 tcaaatagac aacaacatac ggatgtatgt agacatattt tatagtgtag atccattc 358

<210> 5996  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C6  
 <400> 5996  
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 ggagtcgtct gacaccatcg acaacgtcaa ggccaagatc caggacaagg agggcattcc 120  
 cccggaccag cagcgctta tcttcgccgg caagcagctg gaggacggcc gcacccttgc 180  
 cgactacaac atccagaagg agtccactct ccacctggtg ctgcgcctgc gtggcggtat 240  
 gcacatcttc gtgaagacct tcacaggcaa gaccatcact ctggagggtg agagctctga 300  
 caccatcgac aacgtcaagg ccaagatcca ggacaaggag ggcatcccc cgaccagca 360  
 gcgccttata ttcgctggca agcagctgga ggatggctgc acccttgccg actacaacat 420  
 ccag 424

<210> 5997  
 <211> 309  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C7  
 <400> 5997

agtgagtcgt actatgcat cgacgtcaaa gttcttgtgc agtctacgtc atagcccgtc 60  
 cacggggcct cgtaaatcca cgtcatgggt ggtagtttct cagcgtcacg catgggaatc 120  
 gcctggcgtc acatgtcgga gtcgccatct ggcgtattac cactcggca cctaacgata 180  
 tccctatgca gcggttgctg atcgtgcttg gcgacaggga cgtaccctga agcgccgcag 240  
 ggagctccac ggttgcggtg catgcacgga gcttggtgtc gacgtgtcgc cggcgcgcgga 300  
 gcgctcgag 309

<210> 5998  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C8  
 <400> 5998

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 ctggccagca aaaagcgct agccaagcat gtattggatg tgactggtgt tacaattgac 120  
 ccagatagcc tttttgatat acaaattaaa cgcattccacg aatacaagag acagctgatg 180  
 aacatttttg gagctgtgta cagatacaag aagttaaagg aatgagcgc agcagacagg 240  
 cagaagggtta caccgcgcac tgtcatggta ggagggaaag catttgcaac atacaccaac 300  
 gccaaaagaa tagtgaaatt ggtaaatgat gttggtgctg tggatgaaca cgatgctgac 360  
 gtcaacaaat atctgaagggt ggtgttcatt ccaaactaca atgtatcagt ggctgaagtg 420  
 ctcattcctg gc 432

<210> 5999  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C9  
 <400> 5999

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 ctagccaagc atgtattgga tgtgactggt gttacaattg acccagatag cctttttgat 120  
 atacaaatta aacgcatcca cgaatacaag agacagctga tgaacatttt gggagctgtg 180

tacagataca agaagttaaa ggaaatgagc gcagcagaca ggcagaaggt tacaccgcgc 240  
 actgtcatgg taggagggaa agcatttgca acatacacca acgccaaaag aatagtgaaa 300  
 ttggtaaatg atgttggtgc tgtggtgaac aacgatgctg acgtcaacca atatctgaag 360  
 gtggtgttc 369

<210> 6000  
 <211> 218  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-D12  
 <400> 6000

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 acagccgaag aggaattccg tcaatccgcc accgttttga ctcttgagaa caactctatc 120  
 aactcagtag atccttttag gacgccctca gtgaccacag gttgaaccta acgaagttag 180  
 actgtgctat ggctcgatat tcacgcacta gctgtacg 218

<210> 6001  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-D5  
 <400> 6001

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 cgacgaacca atccagccag ccgaactcgt cagcgcgagc ccgcccttcc cgcgagataa 120  
 accatgggtg gggacttgg tttgatacag attgatcaat caacagtagc catcaaggag 180  
 acttttgga agtttgatgc gatcctgcaa cctggatgcc actgcttgcc atggtgccta 240  
 gggcagcaga ttgctggata tctttctctg cgtgtgcagc agcttgacgt ccgatgcgaa 300  
 accaagacca aggataatgt ctttgcacac gttgtggcat ctgtgcagta ccgtgctctt 360  
 gctgacaagg catctgatgc cttttacagg cttagcaaca ccaggagca aatccagtcc 420  
 taagt 425

<210> 6002  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D6

<400> 6002

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 ataacttgtg aggtacgtcg atcgatgggg gggtagttaa agtcgatcta ggtatatgtt 180  
 gggagatcaa tcggtataca tgcattgtgtg tgttagaagc aaatgaggca cgaggagaag 240  
 gatagagaga gagagaggga tgcattgtagg aggtggtacg agaggcatac tatatcgagg 300  
 gtggaggagt gtgcgagtac gagaatgatg aaaagagtgg tgggagtgag gcatggatgg 360  
 tgacaagaga agaggggaag cttgtgtttg tgctaggcac acctggct 408

<210> 6003  
 <211> 360  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D7

<400> 6003

tacgggagaa gaagaagaag gagcagaaga tgaagaagaa gaaggaggag aagaaaaaga 60  
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 aaggataaga agaagaagaa gaacatgaag atgacgggaa gacaagtaag aaggataaaa 180  
 aggagaagga tgagaaaaag aaagaagatg gcgaaggctc agaaaaggag aaggccatga 240  
 aagggaagaa taagaagagc gagagcaaag agaaggataa aaatagcgtc aaggagactg 300  
 gagctgatgc agatgacagt agccccaaga acaaaaagaa ggagaaggac aaggcaaaga 360

<210> 6004  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D9

<400> 6004

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tggcgacacc gaccgtgagg agatgctttc aggactacac aagacggtga ttgttaaagg 180  
cgtcaccgag aaagggtcag aggacctgct gaggagctca gggagttacc acaaggaaga 240  
cgttgtcccg tccgatagcc cattggctac caccacgcgc ggtgatctga agtcggatga 300  
gatcctgcgg gctctcaagg aggtctccaa ggcttcacgc ggctgatcgg ttgcccggaa 360  
gctcgatgat gccgaacatc ttcactcatg ctatttaata tcttccgctt g 411

<210> 6005  
<211> 87  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-E12  
<400> 6005

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tgctcatggt cagtcgcatc gaggggtg 87

<210> 6006  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-041-Q1-E1-E3  
<400> 6006

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tattagattc caatttcac taaggaaagg catggaacac tttacaagaa agaaagttaa 120  
attaccttgt gaatctatca tgcgagctac ttatgaattg aatgccaaag atggtactac 180  
atagatctat tctcactttt atgcctagct aggggcgtta aacgatagcg ctagttggga 240  
ggcaacccaa tttgattttt gtttcttgct ttttgcttct gtttagtaat aaatatttca 300  
tctagcttct gtttagatat gtttttatgt tttaattagt gtttgtgcca agtagaacct 360  
ataggataac ctacggtgat aattaatttg attctgctga naaacagaaa gttttacgcg 420



cacgaaaata a

431

<210> 6007  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-041-Q1-E1-E5  
  
<400> 6007

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agccacaccc cgcaccttgc cccatctgct ctgaaaagat tacaagagat atgctaaatc 180  
atatcaccat gcatcatggg tacttgttca aggcgcttct aggaggcggg catagtcata 240  
ggtaaggaa caccaccact ggcactacaa atatctatgc tgatccactg ctttcacgt 300  
ttggcctggg ttttgcaaca tcagatgccg aagaaccatc gaaatcatca gtcccggttc 360  
tcgatgatac ttcaattcct aaggaggggc ctctcaacc ttgggaat 408

<210> 6008  
<211> 214  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-041-Q1-E1-E6  
  
<400> 6008

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acttcgaaga tacagacctt ggggcgatca gcatggagag aatgcgaggc cacctcggct 120  
agtagattac tactatagac gactacgaca cggacgcaga cttcagtga ttagtgcaac 180  
tgccctcaggg tgtatcacgg tgagttgttc aggg 214

<210> 6009  
<211> 212  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-041-Q1-E1-E7  
  
<400> 6009

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 gtcggcggtgc gggaagatc cgggcgcggc cggcgcaacg gcgctgcaga agcacgcggc 120  
 gttcatcgac ggtgacaggc agcgcgtcgt caacttcgct gacacgtacg caccctgtcc 180  
 ggcccgcggc cttcgagttg ctgcctccac cg 212

<210> 6010  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-E9  
 <400> 6010

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 tacttcagta gtcattgctt aataataatg gtctcagtat taaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa agggggggccc aaaaaaattt aaagctaaat aaggtgtaca agaaatttaa 300  
 aaaccttcaa aaatttcacc aaaattaaaa ttaaaggggc tttttttaaa aagtttttag 360  
 ggggaaaaac tgggggttta 380

<210> 6011  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-F11  
 <400> 6011

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 aatttgcttt ggttataaaa ttagtcctaa tatgatgggc atccaagatg ggtataataa 120  
 aaactttcat ataaagtgca ttgaatacta tgagaagttt ggttctttat gattgttttg 180  
 agatatgaag atggtgatat cagagtcatt ctagtagagt agttgtgaat tttagagata 240  
 cttgtgttaa agtttgtgat tcccgtagca tgcacgatg gtgaaccgtt atgtgatgaa 300  
 gttggagctt gatttattta ttgatattt ctttatgagt ggcagtcggg gacgagcgat 360

ggctcttttcc taccaatcta tccccctagg agcttgcgca tagtacttcg tttggataac 420  
 taat 424

<210> 6012  
 <211> 220  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-F5

<400> 6012

caatacgaat cactataatg actcctatca caaggagggc atgatggaga agatcaagga 60  
 caagatcagc ggcgacggcc acagcgacgg caacaatgac ggcgaccgta aaaaaaaaaa 120  
 aaaaaaacg gacgctcaag cggatgcact ctaagatcca cgcttacgta accttacatg 180  
 ccacctcata tctgtttctaa attgtcacca aaattcatct 220

<210> 6013  
 <211> 234  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-F9

<400> 6013

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 acgatgggag atgtgccacg ctcttaaaaa aacaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 ctcaaaaaaa ataaaaaaaa agaaaaaaaa aaaaacaaaa acaaaacaaa ctct 234

<210> 6014  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G12

<400> 6014

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ggataaccaa ttactggag ttgtgcctcc atcactgact aatatctcca gacttcagct 180  
 ttttgatgtt ggaaataacg gattcagtg ggttgtccct tcagagttgg gaagattgca 240  
 gtatcttaga tggttttgtc tggatgtgaa caagttcgag gcaaacaatg agcgagaatg 300  
 gcaattcctt acttctttga caaactgtag caggctgcga ctgatgtcta tagaacaaaa 360  
 caggtttctca gggcaattgc caacctcaat atctaactta tccacaaaca tccaagagct 420  
 aagtattttg gccacaata tatctggtac tatccc 456

<210> 6015  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G5

<400> 6015

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 aggaacaagt cttgggaggt ggaagggtgc aactaccatc caggcaccaa caggtcttat 180  
 aattgtctta cgagaggtcg gaaggccttc tgtaaggaga acgagctcaa ggcaggagac 240  
 atctgcacct tcaaagtcac caagagcacg ctgtggcatg ttgtcatcga ccgctgctag 300  
 aaatacgggt cacagatgat cttggctgat ggcggacctg ctggttttgc gaacctaatg 360  
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<210> 6016  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G6

<400> 6016

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 tgggaggttg acggtgtcac cgaccatcca ggcaccagca ggtcttagca ctggcttacg 180  
 agaggctgga aggccttctg tagggagaac gagctcaagg catgagagat cagcaccttc 240

aaagtcatca gcatcacgca gtggcatgta gtcatcgacc ggggctacaa atacggttca 300  
cagatgatct tggctgatgg cggacctgct ggttttgcga acctaactag tatcatgatg 360  
aatagtgtgg tgacctgata agccagctgc c 391

<210> 6017  
<211> 183  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-G8  
<400> 6017

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gaatgttcac atgagtggcc gtcgtcatag aacagtgatc atggggataa cgctgaagtc 120  
agccggtgtg gtcgctgtgc agcagaggct ccgtgagctc gctggggcaa tcatgaggag 180  
gcg 183

<210> 6018  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-H10  
<400> 6018

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agcaaaaata aggcacatag tggcttctct catgataaca agtattatgg tgggtgaaca 180  
aattattgcc gagcaattga tagaagagcg cattgttctg agaatatcta ggcaatgatt 240  
atgaacataa gcatcacgtc tgtgtaaagt agaccgaaat gattctgcat ctactactat 300  
tactccacac atcgaccact ttccagcatg catccagagt attaagttca taagaacaga 360  
gtaatgcttt aggaaagatg acatgatgta gagggataaa ctcaagcaat atgatataaa 420  
cccatcttt 430

<210> 6019  
<211> 413  
<212> DNA



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 aagcttttatg gtcatagtat tttgcgaaaa gccaatTTTT cctactacaa aggaatataa 180  
 tttatttaac tacaaagttg gttgaaaata ttgagaaggt tctccaact caatcccaaa 240  
 ttaacatcaa taaccaaca aattatttaa gtaacgtgat gagatcaata tgataatcca 300  
 agaaccagat actcaagatt gtccataacc gggaacacgg ctaatcatga ttagtttgta 360  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-A1  
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 ccagctaagc agcctgcagg agaggatcag ggagaggatg aacgtgaggg aaggcacctc 180  
 ctacatgagg agcgccgtgc ggcgcttctt cgaggctggc atgtctgcca agaggatggg 240  
 cctcgccgac gacgagcaga tcgtcaagat gaggccctcc cttaccacca gaatgacctc 300  
 ctccctgca gatcaagatg atagtccgta gagggcacag accgacgcat acataccata 360  
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 gaag 424

<210> 6023  
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 <223> Clone ID: LIB104-042-Q1-E1-A6  
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ttaccacaat catccttgct gtaaacacct tttgggagaa acccacttga ttggaattta 180  
 ttagaatact ctatgtgctt cacttatatc ttttgagcta gatagttttt gctctaattgc 240  
 ttcacttaaa tcttttagag catggcgatg gcttaatttt gtagaaattg atagtctctc 300  
 atgcttcact tatattatct ttagagtgtc ttagaacaga atggtatttg ctatgggtat 360  
 aaaattgggc ctagaatgat g 381

<210> 6024  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-B7  
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 gttgaaccat atctattcct catccttgag tagtggtcaa gcatactgtg gctgtttggc 180  
 tccagttttg gaagtcattt ttgtttgtct gagacatctt ggaaagaaca gtgtaagaat 240  
 gaagtatttc tgtttaatgc cagtttagtat ttttgctgaa aaaaataaaa ttcaaataac 300  
 aaaaaaggat aaaaatcaga attcccaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagcgg 360  
 ccgctctaaa ggatccaagc ttacttaccg gtgcat 396

<210> 6025  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 tccccctagg agcatgcgag tagtgccgag gtttttgatg acttgtagat ttttgcaata 180  
 agtatgtgag ttctttatgg ctaatgttga gtccatggat tatatgcact ctcacccttc 240  
 catccttgct agcctcttcg gtaacgtgca ttaccctttc tcatattgag agttggcgca 300



aacttcgccg gtgcatccaa accccatgat atgatacgct ctatcacaca taagcctcct 360  
tatatcttcc ccaaagcagc caccatacct acctattatg gcattttcat agccattcna 420  
ggatatattg ccatg 435

<210> 6026  
<211> 242  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-042-Q1-E1-D12  
<400> 6026

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cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggccg ctcaaaagga tcaaagctaa 180  
cgtacgcgtg aaggcgacgt caaagctctt caagagggtc accaaaattc aattcacggg 240  
gg 242

<210> 6027  
<211> 272  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 6027

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gaaggcttta tggccatacg attctcctcc tgttctactc ccgtgagctc gcgggactat 180  
tcaactgacc acaccgtaat tatgccctgt cgaatcgtat tctcatctct acatggtgca 240  
cgagacgact gtgcatgat caaaatccgg ta 272

<210> 6028  
<211> 405  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-F6

<400> 6028

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aattttgggc gaagaccgaa gagcggcggc aactataatt tccagtgcta gcatctgtaa 180  
agtatcacca aaatatgcat ctccattcac tattgtaaga tgttctttct cttttctgat 240  
tgagatgtat gtagacgaat tttgacgtga ttgttcattc aattcaatat atatgtaatc 300  
tatattataa aatatattat atttgtgagc agaggaggtt gcagtttaga tactccctcc 360  
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<210> 6029

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-F8

<400> 6029

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atttgtgcct cagatcctag cttacgttca accatggtct gtaagcacat ggtttcttat 180  
ctagtttccg tatttatctt ttgatgatgt tggttgttca ctattttgaa acatgaataa 240  
ctttttactg acttcgatct ctctcatata ctacatgatt cagcttcacg attttcttca 300  
tactatctta tgaaaatgta acaaacacat ttttgaaact ttttaacatt ttaaaaaatg 360  
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<210> 6030

<211> 434

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-042-Q1-E1-G3

<400> 6030

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gacatgtccg ttccgatccg gacgtgtccg gcggcggaga gggagcgggg ctaggggttg 120  
 actgcgcgaa aaatcccgag gggatcgcat atttataggt agagggagct angagagtcc 180  
 aaatgaggag cggttttcgc ccacgcgac gtgatcgaac gaccgagagc gtggagggga 240  
 gttagatggg ttttgggcta ctttgggaagg ggtgttgggc tgcaacaaaa gaggcctttt 300  
 acggttacct gggttaaccgt tggagtatca aacgacctcc aaatggcacg aaacttgaca 360  
 agcgggtctac cgggtgtata ccaaggccgc ttggcaaacc tcgggtcatt ccgagaaagt 420  
 taacacccgc tcac 434

<210> 6031  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-G5  
 <400> 6031

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 aaattgtcat catgatttta attttcaatt ggagtatgct tcacattata gttattttgt 120  
 tgagtttgct cccactacta ttcagtgaag aaaatttgct tttgtggaga gtaataaaat 180  
 ttctatgctt gtagatcatg aaaagaatgc tttatgtgat agttatattg ttgaattcat 240  
 tcatgacgct attgaaaatt attatgaggg aggaatatat gcttgttagga attgcaataa 300  
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 ggtttagactt aaatg 435

<210> 6032  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-G7  
 <400> 6032

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aaagtacttc acacactttt gtgttttgtc taattgcagg tgtatgggac atttgtacaa 120  
tccacatatg aagatagggg aaaaggagaa gtttaggttc tgttcaaaaa gtcctctcac 180  
gtcacttttg ggccaagaga agatagagtc catgtctctc acgttctgga ttcagattcg 240  
aactgcacag acatacctga ctcaaaacgc caacaacttt ttcatacggga ctccgaattg 300  
ggtgattctt tctttgttgg aaagtagatt tcatactctt tccaacccaa ttggattcac 360  
ctttaaattc gtccggagcg ttgagatatg gacgaaacaa tctgacgctg cagcagaatc 420  
tgagtcaaac aaca 434

<210> 6033  
<211> 447  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-042-Q1-E1-H7

<400> 6033

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cacacagtcg attacaagga agaagatcta catatccgta ttgccaagct ttccttcac 180  
gccaaggaga gtcccatccg gacacgggac gaagtcttca atcttgtatc ttcatagtcc 240  
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cggtagcccc tgaaccaggc ttcaatgacg atgagtccgg cgcgagatt tgtctttggc 360  
attgcaaggt gggttcttcc tctgaatact ccatagaaga ttttgaacac aaggatagtg 420  
tccggctcag canaacaagt tcacata 447

<210> 6034  
<211> 451  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-H8

<400> 6034

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tttttctcgggt ttccttcata acatttttctt ttcttcacaaa actttttctgg tgcaattcac 180  
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 gggttcggtaa atgtagacaa gacccggaac accttcgggt caatggccaa tagcagaact 300  
 gtggacatcc atattgtccc ccctacactt acacgaatta ttatcgagtg aacctattgt 360  
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 atccatgtga agcaactcat gatcaccata c 451

<210> 6035  
 <211> 345  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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 <400> 6035

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 aatatttcca aaaaggtatc agaatgtttc aaaaaaatgg atgcatttaa aaatattctt 180  
 attttaaaaa aaatctaatt tcttttaaaa agcatgtatt aaaaaatgtc agtcttaaaa 240  
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 gttgcgtaat tgcacacaca aagaagattt tnggtttttt tggcc 345

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 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-A6  
  
 <400> 6036

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 tgcggacgct ggggtcgacc tccgcgacg aggtgcagcg catgatggcg gagatcgaca 120  
 ccgatggtga cggcttcacg gacttcagcg agttcatctc cttctgcaac gccaaaccgg 180  
 gggtcatgaa ggacgtcgcc aaggtcttct gaatcagttc atttcacctc agccgtccga 240

tccaggagcc gatccatcta cgtacggctt cgtatatcaa tttcatgcaa ctacctactc 300  
 cgggtcccgat tcagcctcag cttcacctga ggccggccct aattttgttt gatcaatttt 360  
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<210> 6037  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-A8  
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 aactaatttg gaagatggaa aagtcataga ccttgatgga aaaaagtggc ctgatgctcc 240  
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 aactgatttt cgcgtgaagg actccaaaga ttactatgga ttggctcctg ntaaatctgc 360  
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<210> 6038  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-B6  
 <400> 6038

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 cacggggacg aagaagatac aggagggaaa cgacggcccg ctacagcgcg ttcgtgggag 180  
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 gaggaggaga cagaagcgcc agagcgcgcg ggtgacatgc caaaatggtg gtcaccgcgt 360  
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 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
  
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aacacggtgt ctgcaaakat ccccatggcc cctctcttcg ggctactcaa gccaacggc   180
aagatggtca tggtcggcct ccagagaag cctatcgagg tccctccctt tgctctggtt   240
gccaagaaca agaccctggc cgggagcttc atcggcggca tgagggacac ccaggagatg   300
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gtgaacacgg ccat                                                    374
  
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<210> 6040  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F9  
  
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gcatgccaga ttttgacgaa gggcagtggt tgcattgact cgcaatgtga cattacattc   180
acatctgtcc caaaaggatc aacatcatga ccatcataat cgccgtgctc tccgagtaag   240
ttgtcggcag gaacaaaccg aacctcgcaa tcataaaaaa agcggccgcc ccataggatc   300
caaccttacg tcaccgagca tgtgaagtca cagctcttca aaagggtcac ctaaattcca   360
ttcatg                                                    366
  
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<210> 6041  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A10

<400> 6041

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ttttatagaa attgttgatc tctcatgctt cacttatatt attttgagag tcttctagaa 180  
cagcatggta atttgctttg gttataaaat tagtcctaata ataatgggca tccaagatag 240  
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tttatgattg gtttgaggta tgaagatggg gatattagag acatgccagt ggagttattg 360  
tgaatttgag agatacttgt ggtaaagttt gtgattcctg tagcatgcac gtatggtgaa 420  
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<210> 6042

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A8

<400> 6042

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gaaggtgtgt gcgcgtgttg tgagcgtctg cgtctgcatt gtgtttctaa agaaaaaaaa 180  
aatctggctg ccgatcgacg ggtgaagaaa tgccaagaca tcatcttggt gcaaataccc 240  
caccctactc tctgcgagat tcgctaagtt cgttgtgcat tacatactgg aatgcgtagg 300  
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<210> 6043

<211> 429

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-044-Q1-E1-B10



<400> 6043

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caacgtgtac tgtagaaatt cattgccttt tgtttttcac atgggtcggc catggctata 240  
tttctatgaa agcgttgaaa tgtgatttct ttttgtatca cacggctagg caatgatgca 300  
tacacgaatg gtaattcact ggcatgaaga catgggtact gccactagg actacacgtg 360  
tcgaagttaa gtctgtcatt ctgcangggg caacgggtgct cagatcaaatt gttcatgtca 420  
ccatgacgt 429

<210> 6044

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B12

<400> 6044

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tggaagcact ctgagattca acctaacagt gttggggcct tagcagtgtc ttagctttct 180  
aatttccacc aatccatccg tcagtccctt ccggtgtaat gattcttttg aacaagaaaag 240  
ggaacccggc cgtgcaacag tagtagctta ggctagctct gcgtatcatc atcatcatct 300  
cctttcttct tgtgctaagc ttccaagatc gatcggtaca tagcgcgga cccttcctat 360  
ccattctccc tcaaagtaga ggggattgca ttgaagatgt gtaatagtat catttgtatt 420  
gccattatat atata 435

<210> 6045

<211> 404

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-044-Q1-E1-B2

<400> 6045

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaagggg cgcgccaaaa ggatcaaagc ttacttacct gtgaatgcaa cttcaaacc 180  
 cttcaaaagg gtcacaaaaa ttcaattcac gggccgctgt ttaaaaacgt cttaacggga 240  
 aaaaccctgg ggttacaaaa cttaatcccc ttgaaaaaaa tccccctttc gcaaactggc 300  
 gtaataccaa aaaggccgcg accattcgcc cttccaaaaa tttgccacc ctaaatggca 360  
 aatggaaccc cccctgtacc ggcgaataaa ccccgccggt tttg 404

<210> 6046  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-044-Q1-E1-B6  
 <400> 6046

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 ttacttttct ttacttttct gttgcaatta aaagaaaaga aagaaataaa aagaaaagaa 120  
 ataaacaaaa gaaaagaaat aaatcaagaa gatcatatac taatcttatg gtaggtgatg 180  
 gcaccacata aggaaaagta taagtagaaa attttattag agattgacaa acatagcatt 240  
 agtcaatgat gcaactcatg aaagaattaa taagggaaga gaatattcac atacaaatag 300  
 actatcctac aaatcttttg tgattgtgag ccccatcag aatattatat gccagaattg 360  
 ttgatgttgg acaaggaaca cagcttaatg atttacgttt gttcatattc acatagaaga 420  
 catattgtca tag 433

<210> 6047  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-044-Q1-E1-B7  
 <400> 6047

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 tgaacaccaa gtatattaac attaagcaaa ttaccatgtt attaaagact ctcaaaataa 120

tctaagtga gcatgagaga tcaagtttct ttaaaacaaa tccaccaccg tgctctaaaa 180  
gatctaagtg aagtactagg gcagaaatta tcacgctcaa aaagatataa gtgaagcact 240  
atgagcaaat tagcaagctc aaaagatata aggaagcaca tagagtattc tatcaaattt 300  
caaatcatgt atgggtctct caaaaagttg tgtacagcaa ggatgattgt ggtaaactaa 360  
caagcaaaga cacaaataat acaaacgct ccaagcaaaa cacatatcat gtttgtgaat 420  
aaaaatatag ctccaagt 438

<210> 6048  
<211> 430  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-C6

<400> 6048

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agacgggaca ccattgcctc tatcaagtgg tatcagattt ccaggttgct cggtgagatt 120  
ttacagtttt tcgtagttta gatcgagtct gttcttcata cctacagtcc acgaaaaagc 180  
cacagaaaaa atttaggggt agttcatcat atccgaacca atctgagcct ttgcatagtc 240  
tttttaggggt tttgctttgt tgaatttgcg gttacatcgt cgtgtctagt tgctggctctt 300  
agagtctagt ctttttagagt ttcgagttct ggtcataagt tgtcacgctg ccgccgcacc 360  
atcatcatcg cccctgccat ctaccaccac cgctccgaat ccgtatccat atagcagcac 420  
caatccgtgt 430

<210> 6049  
<211> 452  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-C8

<400> 6049

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tcatggcctt caaggaccac aggaaaacct tggagaagtt cgttcaagag cacattgacc 120  
tcgccgaagc cgctgccact tcacgtcccc ctaccggaca agcagagtaa aagctcgatt 180

gccattatta acctagctag ctgcaaagac gaaggagggt tgttgatgta tcctatttgg 240  
cttccttatg tagtttgetg catcatcggt gtcgagccaa gaacaactac ttatgtatgc 300  
attagtgtat tacgctactt gtcagcgatc gagtctgtct taactcttga gtagtagtaa 360  
tagttgctat caagctgtgc ctgtgcgctt gctcgctata actaattttg tacaacgtaa 420  
tttgtttggc accaagttct gttagtaata at 452

<210> 6050  
<211> 403  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D11

<400> 6050

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attattgtaa ccaccccatg catgtctaac aacttggatg tattccaatt gtattgtgtc 120  
ttcgccagtc cttagagagc catatttget ttaatcctca catggttaca accataatag 180  
aatgcaccct cagcaatatg tttcatcaca ttgcattaat taaccaggca attaactatt 240  
tacaacattt tatgttccag tcattagtca atcaccatat tgcacattat aacacactcc 300  
tatgacaatg tcaactagtt acacatacca tacgttcgta acaccttgga aatccaacaa 360  
ttgtaattgt ttctcatgta cttgttgcaa ccaaattoga ttt 403

<210> 6051  
<211> 185  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D4

<400> 6051

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aaaaaaaaaa aaaaaaacaa aaagataaaa aaaaaaaaaa agcggccgcc ctacaggatc 120  
caggcttact tacgcgtgca tgctacatca tatctcttct aaattgtcac ctaaattcat 180  
ttcaa 185

<210> 6052  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D6

<400> 6052

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atataacaac attaatatag aaaacttagt agagaaggaa gcactagcac aacgcatgct 120
cacagtgctt acccatatac tgcattgtgct atcgaaaggg atgatgattg tcgttcgac 180
tgggagcatc caacggtgta tacgtacgat ccgtgggggt tgggttctcg ccaatcagaa 240
cgcacgaccc agatcacgcg cgcagcagga gggggacatc ggccacgggt ttgtaggcac 300
acggctttcg tgagtgaacc gtgtgctatt tgaaaacatt ttatgagaag aatctcggtt 360
tttaaattccc cgtaaattcca aaactcaccg gagaatcgtg acatggcca 409
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<210> 6053  
 <211> 324  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-E12

<400> 6053

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accgagcctg aaggtccttc cttggcccat gagatgagat atcctgggtg agactgcacc 120
tctgacatat ggatctagga ggaagggtgt aggacacagg cagctggaga tccatgggtgt 180
tgagctcact gtaattaaaa tggctctctc cccgcctgcg gtgttgatg tgatgtggta 240
tcaattggaa taagttcctg atagaacctc tgacattggc ttcattgggag ctttgggccc 300
taataagagt tgcctctgat tctg 324
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<210> 6054  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-E2

<400> 6054

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 tacatgtcaa catgttgtgt gatattctca gctaagtctg gagtgacagc ggttcctggg 180  
 gagatggata ggacgactgg tctctcaagc tctttcagga tctgcaaaac gcaatgtgaa 240  
 tttcccatga attgatctca acagattgcc aattgtgatg tagtagctaa ttctagaatg 300  
 gagggctaca ttaattaatt caaacctctg aaacggccac gatttccttc gggctataat 360  
 ccgtgccaaa gatgcaatcc aactttactg caaattgaac aatttgggtgc atcatgttac 420  
 cgttg 425

<210> 6055  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-044-Q1-E1-E5  
 <400> 6055

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 agccccgggt gccgggattt gagtcagact agcagtagcg cgttttgccg aagacgtgct 120  
 atagcgagga gagctatagc gtgttcacgc gaaatgcact acagctattc ctttctgttt 180  
 gatttttctt ttgttttcgt tacagtttta tttgtttcat ttgcctttt gataggtctt 240  
 tcatttgcag ttacttttct acttattttg cgatttattg gcttgggcat agcagtaggg 300  
 ctctacagga tgagcgtgct gcgagagagt ggtagcagt anggggcttc tgggtgaagc 360  
 gctaggacgg agtcctagcc taccggcatg agtgagggaa ttt 403

<210> 6056  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-044-Q1-E1-E7  
 <400> 6056

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gaaagactgc ctggtgccgg agaagatgat ggaccggact caaacaagac aacgtcggaa 120  
 gcagctacct cacggtagca ggcgactgat tgtctgctgc caacttggca tgtgactgaa 180  
 catgtataaa ataggattat gagttgacaa aggttcaccg cacaggggtgt atactggttc 240  
 attctacaat tattttggta aaggtttaat gatcttttgc taaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa 360  
 aaaacccaaa aaaaaaccca acaaacgaaa aaaaaagcgg ccc 403

<210> 6057  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-E8

<400> 6057

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 aactaaccgg tttggatatt tgatctgagg ggcctctggc ccgatagcac taaccatcac 120  
 gtgggcatag tatgggcatt ctgcgtcgta tgcacgacc gaagcttaat agacgtcatg 180  
 cgactgagcg ggcgcgcgcg ggttggactt gtaagctccc gccttttttt aaggaggtag 240  
 ctaggtctgc tcaccggccg cccacgcaac gtgcaggagt tccccggggc atggcccatg 300  
 acccctgggg gcataggttt agtccggcgt gcttgacctc tctattaagt ctaggtcggg 360  
 ttgcggcgta ttgtttggac gaggccgggc atgaccagg aaagtgtgtc cgaccggagt 420  
 taatcgagcg tgggtgggt 438

<210> 6058  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-044-Q1-E1-G11

<400> 6058

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 aatctgcgcg caggactcat cgtcattgaa tcctggttcg ggggctactg agggagtcct 120  
 ggattaggcg gtccttggac agccggacta taccctttgg ccggactgtt ggactatgaa 180

gatacaagat tgaagatttt gtcccggtgc cgggtgggac tctcctttgc atggaaggca 240  
agcttggcaa ttccgatata tagatcacct cccttgtaac cgactttgtg taaccctagc 300  
cccctccagt gtctatataa accggagggt ttagtccgta ggacaacgaa aatcataatc 360  
ataggctggc ttctanggtt tagcctctac gatctcgtgg tagattaact cttgtaatac 420  
tcatatcatc aagatcaatc 440

<210> 6059  
<211> 245  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-G5  
<400> 6059

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tagaatacaa tacatttgggt attggggcat gcttgtatcg atgcctatgc aagcgttgta 120  
acctgtaaac cgacatactg aaaatgcgag gaacgttaag ttaagaagga aaaaaaaaaa 180  
gaaaaaaaaa aagggcagag acgcgaaaag agaaaaagca agaagaaacg atacatgcaa 240  
cgtca 245

<210> 6060  
<211> 370  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-G6  
<400> 6060

cgggtgagtt gcgttgcttg gttaccttcc ggcgttgaga gttttgtttc ttaggctggc 60  
aacgtgaaca tcaagcgttg ctgaatatgt gcctgcggct gctgttgatg gtagtagcca 120  
cacattataa ttatatggga tggtccattg tcttgttcac caggttatga ggctttggcc 180  
agggtttttag ctgcagtttc gattttcatt gacaaagaaa aaaaaaaaaa aagaaaagac 240  
gaaacagaag aaaaagtaga aaaggaaaac gggagaaaga aaaaaaaaaa cggccgctct 300  
aaaggatcca accttactta gccttggatg cgacgtcaga cctcttcaat agtttgacct 360  
aaattcagtt 370



<210> 6061  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-H11  
  
 <400> 6061

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 aagaagacat aatgcgttta caatccttag atcatgttg ttataatgaa aatcttagaa 120  
 agagggttcc taccgatatt ctagttgata gaatttctga acttaatgat aattttgata 180  
 ttcaaaacag cgggttgggt tttcctcttg aacaaaggct catgactttt tgccaaatga 240  
 atgcgtacaa tgatgagttg gttgtacaat atgaagggcc aaaggaggaa acaattcatc 300  
 ccgagcttga tcatggggga cttttgtcca ttaaattttg cccttttgat tactttttct 360  
 tatctcaaaa aaaacttgct gctgaacgta gggagtaga gatgagtttt caagattttc 420  
 cctatcatta ttatggcaat accta 445

<210> 6062  
 <211> 253  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-044-Q1-E1-H3  
  
 <400> 6062

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 atacctgagg gtccccggga tgctgtagg tgggcccggg aaggccggat ctgccaacac 120  
 aacggaaaca aggaaaaagg ggcaaaaaaa aaaaaaaaaa aaaaaaaaaa aagcggccgc 180  
 tcaaaggat caaagcttac ttacgcgtaa atgaaacttc atacctcttc aaaagtgtca 240  
 ccaaaattca ttt 253

<210> 6063  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-H9

<400> 6063

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catcatccca caactaactc attagtcaca ttgcttgcaa ggcttatagt gatgtgcatt 180  
actgagaggg cccagcgata cctcttcgat aatcggagtg acaaatccta atctcgatct 240  
atgccaaactc aacaaacacc atcggagaca cctgtagagc atctttataa tcacctagtt 300  
atgttgtgtc gtttgataga acactaagtg ttcctccgat attcgggagt tgcataatct 360  
catagtcata ggaacatgta taagttatga ataaagcaat atcaataaac taaacgatca 420  
tagtgctaag ctaacgcact ac 442

<210> 6064

<211> 160

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G1

<400> 6064

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taaaataaga aataaaaaag cggtgctct agaggttcca agcttacgta ctcttgggtg 120  
ggacgtcata gttcttctat attttcactt aatttcaatt 160

<210> 6065

<211> 376

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-A11

<400> 6065

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tcaatcaaga agcctggaaa aaacgtgct gcaaaaggca aaacaacggc taggggggtg 120  
acttgtagac tgggatgtat cccaacacgt ggagccgagg acaatgcgta cgtgcgtgca 180  
cacacacatg tgctgtacat gtgatgaata ctgaataatc gagtcagatg accgcctgtg 240

gtcgtcgtct cgaccgcctc gtacatgtag acgttgcaca acacctgtac atgtgattga 300  
 ataaccgaaa aaaaagaaaa taaaaaaaaa aaaaaaaaaa aaaaaaaaaa gcgggccgctc 360  
 tagaggatcc aagctt 376

<210> 6066  
 <211> 267  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-C2  
 <400> 6066

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 tcactcaagc ggcatgtact cacaacacag caggttcaaa ggattgaaga ggaactggga 120  
 gatgtactcc gccgtccagt cttcaatagc aagctgatgc aacctgagat tgttgattata 180  
 agaaaaagcg gccgctctac aggatcaacc ttacttacgc atgcatgcaa catcataatt 240  
 cttcgagatc gtcactcaaa ttcaatt 267

<210> 6067  
 <211> 141  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-046-Q1-E1-D3  
 <400> 6067

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 gggccaccaa atttaattta a 141

<210> 6068  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E11  
 <400> 6068

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actgccgccg gagtgcctca atatgtacat ctcccaaagc tgcctcagcc tggcaccatg 120  
 tacacagggtg gattgtcaca gggcatgttg gatcagatgc gtccatatgc acccgtgacc 180  
 caggccaaat ccgggtccaa ctgccggcgg agtctccaag tcgggtccat cgccatgacc 240  
 tgctactccc atgtaccgt ccctgtcacc catgccgcct gaaccatgcc cactgatgc 300  
 cacctaatgc gcccaagaca aagccgatgc cgccgtgccc gccactagct gtatccgcgt 360  
 cgagcaacac cagcaacaac tgctgggtgt acgtgacgac gtctatgcac acatacttcc 420  
 aagtgaacac gccatatattt c 441

<210> 6069  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E9  
 <400> 6069

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 aagtgaaccc gacgcactac cgggagccga ggttctacac caaggtgttt aaggaatgcc 180  
 acttctatga ccaagagggg aattcctttg agctttctct ggtaacttcc aagtgcattg 240  
 gagcttatgt gaaaagcaag aagaaccaga accagatatg ttggctgtgg gagaaggcca 300  
 agtgcacaga agacaaaggc ttccagagat tcctggacaa tgtgcagtac aaatccactg 360  
 gaatcttgcg ttatgagcgc gtatttgggg agggttatgt tagcaccggt ggattcgaga 420  
 ccac 424

<210> 6070  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-F5  
 <400> 6070

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cttttttagtt taccacaatc atccttgctg tacacacctt ttgggagaga cacgcatgaa 180  
 tcatgattta ttagaatact ctatgtgctt cacttatatt ttttgagcta ggcaatatcg 240  
 ctctagtgtc tcacttatat ctttttatag cacggcgggtg gttttatttt atagaaattg 300  
 ttgaactctc atgcttcact tatatcattt tgagagtctt ttacaatata atggtaattt 360  
 gcttgggtta aaagactaat cct 383

<210> 6071  
 <211> 151  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-G7  
 <400> 6071

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 cgccacgggt acggcaagaa ggactgcgac c 151

<210> 6072  
 <211> 176  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-H2  
 <400> 6072

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 caaaaaaaaa aaaaaaaaaa aaaaaaaaaa acgggccgcc caaaaggatc aaacctaacg 120  
 taccctgtaa ggcaacgtca aacccttca aaagggtcac caaaattcaa ttcattg 176

<210> 6073  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-H5  
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 ttctttcacc gagcaatggg gattgacgac ttgattacag acaagataga tttggcacat 180  
 tcttacctgt aaagataatt tgccaaataa agccgtttat aagctttgcc actttgataa 240  
 tctcttgtag tgacacaatt tgaaagaatt cctttgaaaa aaaaaaaaaat aaaaaaata 300  
 aaaaaaatg aaccttaagc aaaactacgt aaaaaaagt tagaaccccc tcatgaagat 360  
 caattataaa aattatctta gaatgccaaag aaatggctgc tacaattggg acaccaaata 420  
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<210> 6074  
 <211> 467  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-H7  
 <400> 6074

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 gcacgcattt gacgtgcact acatcaacta cgattgatgt caccgtagat ctgtaacatg 120  
 aatttgggtc agatataagg gggaagtgc aatatgaatc aataccaacc ttgtatactt 180  
 gttaccctta ttctgattgc atgatgggtc aatgcttagt gcattcccaa taacatgcaa 240  
 cgtatggtga accgttatgt gatgaagtcg gagcatgatt tatttattga ttgccttcct 300  
 tatgagtggc ggtcggggac gagcaatggg cttttcttac caatctatcc ccctaagagc 360  
 atgcgcgtaa tactttgttt cgataactaa aagatttttg caataagtat gtgagttctt 420  
 tatgactaaa gttaagtcca tggattatat ttaaacacac cttcca 467

<210> 6075  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-A1  
 <400> 6075

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 agccagtggg tggtaattc agaagtagca gtagcgcgtt caagaaagca cgctactgct 120

aagttagcta tagcgcatte tggtatacac gctactgeta ctcttttctc ttttttccct 180  
 ttttcattta tttttcttca cattttatnt tttcttttca cettatttga tttctttcat 240  
 tctcaattac cttttctatnt gctttcaatt taatnttata tccttttagca gtagcgagtt 300  
 tagaagaaaa cacgttgcta caaaggacgt agcggttagcg cggttcaata tggatcgcta 360  
 ctactatgtg tagcctatcg gctaagccgt gggaataat 399

<210> 6076  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-047-Q1-E1-A2

<400> 6076

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 gtgggttaaac ttatttagta tagcatttat ttgaggcact tgggcctaata attgaaatat 180  
 taagatagag atttaaatta tgtactcttg ttttgtaaac actatcttgc aattgcttcg 240  
 tggaccatgg gagggatgat tcctagaagc catgttttcc aataatttca acagctctgt 300  
 gttaagtagc ttagttatta atttttatnt ctgtagtata atcctgggag gttgctggac 360  
 caggaaacat aatctcatcg gtaatttcct aaggaaaata ttaggggttc tctgttgga 420  
 atttttt 427

<210> 6077  
 <211> 237  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-A3

<400> 6077

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 gtgaaaaaat tttcaaaata tcaaattgaa aaaaatcggc cgctctaaag gtttcaagct 180

tactttcccg tgcattgacgac tttttacctc ttctaaagtg tcccctaatt tcaattt 237

<210> 6078

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-A8

<400> 6078

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tgaactttgt tgtgtacacg gcattcgcca agaattacac ggtgaagaaa gtcgagcccc 120

ggtgaacacg gtttgcgtgc ggtcacaggc gtacgttttt catcctcttt gttgtgtatg 180

taccgtctac aaaaccagtt cgatgtaatt aaatatcgcc caaaattcct gtagctgtgt 240

tcatttgaat aaatataaaa ggtgcctttg gaacagaaaa aaaaataaag tcacaataaa 300

aaaaataaaaa aaaaaaatac aatagaacgt aacatgcaaa aaaaaaactg cacacactaa 360

caaaaaaggg gccgccctaa aggttccaac ctt 393

<210> 6079

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-B12

<400> 6079

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caccattggc gctttccgtg ggaagtgata gcaatggaag cggagctgta gctcttctga 120

aaattgcaag gatcttttca caaatctatt caagccttaa gaccagaagc aagtttaatc 180

ttctcttttg attaacatct ggctgaccct acaattaaaa tggaactagc aaggttatca 240

atTTTTTTta cagcggcttg aagttttgac caacatgtgc gtgatattat tgactatgca 300

atttacttaa gtatcattag ttcttagagc aatgatctct ggatgcatgt atcaaagcct 360

ccagagaagc cttacatcaa gcaaactctt gaggatTTTT cggatgtctc caaggaaatg 420

ggcatttcag tcgcac 436

<210> 6080



<211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-B7  
 <400> 6080

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 tgatgaccac ttcaaggaac cttctagtct tgaatgtgta agattagtga accaaatagc 180  
 cgaagaaaac tgggaaagat tcgcgtcaga agagatgaaa acgttgcaag ggcacctcct 240  
 cagataccca gtgaaggtag agcacgatgg taagatcgtc ccgctgccc accaagaatg 300  
 cttccccgat gttggcggca agatctcgga cgctccgacc tcgcttctctg attcgctgac 360  
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<210> 6081  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-B8  
 <400> 6081

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 tcttaaagcg tccgcgagcg cgagcccgga cggtcagaag cagcgctacc cagacctgac 120  
 caaggccgac gaggaatgct ttgaaacctg ctacaaggag ctgaccaatg gcggcgaaaa 180  
 actcgacaat ttgtgcacca gcatagaggg ctcgacgacg atcggcatgg ctcagctccc 240  
 cgaaatccgc agcttcatca aggagaacaa cggggcgcat gccagtgga attgcatag 300  
 gtgtcgccct gcaaatacga agaagacacc cgacgatgct tccaagaaga acgatgccga 360  
 gaaggccatg gctgtcctgg atgtgctcgt taacaaagt accaagtaca gaaaaacaaa 420  
 ctctc 425

<210> 6082  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-C10

<400> 6082

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gtgctcacat gttcttgga tgcccatcac cgtccacatg tacaccaagg gcaccgataa 180  
ccccaggatc atagcagagt atggccagga gtacggcaag gacaaccgg tccgtgttct 240  
atacgacggt tatgggcact acgacgcgt gcagccatct cttgtaagaa cacaaccaag 300  
actgagagga gcgtagctaa ccggagaatg gtgcgctatg taagcttctt ctactacttc 360  
tctagggcag ccgcataaat tccgacatct gctgcaactt ggtttcgttc gagttggcag 420  
atcacggtat agcaca 436

<210> 6083

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-C11

<400> 6083

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atztatgcgg aagttagata tgagcatcac ttcaaacatt actatgtaca aattcatctg 120  
agtgaattgt tccagctttt caatctgcgc gagctcgaca aatctatcat cagttgctac 180  
gttctgtaag tgatttattt ctaccccatc tcgttcatat tgcctgcact atatatatgt 240  
cctaactata ttgttgtgtc cgctattata catgcagaat gaagattaag gaatgcagag 300  
taaggaacat ccatgatgtt gggttcattg acccacacat cgttaatgaa tatgtgttgg 360  
agcatcacc cgcgcacatg gaggcagacc tgtggcagtt tcttaciaaag caggaactca 420  
aaagtgatat tctatttcc 439

<210> 6084

<211> 203

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-C3

<400> 6084

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cgcatgtgtc accaagatca cagttcacat cacctcctac tgcaacaggg aacttggcga 120  
caacgctaac gatggacaac attaatacacc atgccacaca tcaccgctac ggcaacacgg 180  
gccacaactg ccatgccacc acc 203

<210> 6085

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-C5

<400> 6085

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agttggatct tatgtttctc ctccccctct actctcttgt aatgaaatga gtttccccctt 120  
tgaagttatc ttattcgatt gagtctttaa agatttgaga aactttaatg tatgtcttgc 180  
cgtgcgtatc tgtggtgaca atgggatacc acgtgattca cttgatgtat gttttggtga 240  
tcaacttgcg ggttccgaca atgaaccaat gcatagggtt ggacacatgtt ttcgtcatga 300  
ttctcctgta ggaactttgg ggcactcttt gaggttctat gtgttggttg aatagatgaa 360  
tctgagattg tgtgacgcat atcgtataat catacccagg gatact 406

<210> 6086

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-D10

<400> 6086

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tgctactgct ccggaacact taggctggcc ggcatgtgtc cttcttcgtt cctgtgtctg 180  
tcccttcggg gaaatgtcac gcgatgaata ccggagtcct gttagcccg c tacagcccg 240  
ttcaccggag tcctgctagc ccagtgtctac agtctggatt cactcgctga tgaccgacac 300

gttcgatgct gggtcacatgga tgctgtccc tgtaagttag tgccactttg ggttcacgac 360  
tagccatgtc agcccggtt cttgtcata tggatgctag cgacactatc atatacatga 420  
gccaaaaggc gcaaacg 437

<210> 6087  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-D11  
  
<400> 6087

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atggtgttcc tggatatggt gatggtgtat accgcggtt tgtgttcgac ggtgggttca 120  
cagcaatgcc gtgaccgag aggtcatgg aaaaagatat ccagactgg tgcgtgacta 180  
aatgcgtca actaacgatt ttccattgat ctgggacatc catctactgc tgaagaggaa 240  
ctgatatctc catacatatt attacatcg tacttggttc ttagcttgat gaaatacttc 300  
cagttgttgt acttaatgaa catgaaatga tctgttggtt cgttggttca gacattgaaa 360  
tgatgcagac tggtatatgt ttagacgata aaatgttaaa tgcgcattt ataggaac 418

<210> 6088  
<211> 416  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-047-Q1-E1-D12  
  
<400> 6088

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gaactccag gaggaggacc ttgccgttg cgaggagaag ctgccgtga cactccgtga 120  
caaggacgag gaggtccagg agctcgatc gcagcggatc cgggaactgg aggagaggca 180  
cgaggagggc ctcaatgctt aggccaggc ccatgccggc aaggtggacg agctggaggc 240  
agagcgtgac gggctgaaga ggcaggtcca ggagctaacg gggtagaggg acgcggccaa 300  
gggtgctttg gtcacgcat aggccgtagt cctcgagaag gccgcgtac tctccatggc 360  
caacgagtcc atcaaggaca tgaacctgaa gctgganggc attgaaggga cactct 416

<210> 6089  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-D2  
 <400> 6089

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 ccagcagctc caacagcacc atcgcgcca gtggagcacc acgaacaccc aggagaggtc 120  
 gaaggaagat gaggggccc ggaggaagca gaatgccgag gcgcggtcgg cggcgagctc 180  
 cagagcaaga cggcggccag agggccgcct gtcctggacg cggttatcta gaggaagtgt 240  
 gggcgccata ggaggagggt ggtgtggtcg aacgggctcg gaggggtctt atttataggc 300  
 ggggcgagga aggggatcga gagcaccggc gagctctctt ggaggaggtg cacgacgacg 360  
 agaggcgtca gggagagaga ggcgggagtg gtcaggggtc a 401

<210> 6090  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-D6  
 <400> 6090

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 atgtgcaaaa aagggaagat ctgagatgga gcaaaccaat tcatggctct tctaacgcga 180  
 atgtagatgc gtcatacaat gaggattaag cagcaccatg tgccacatga gctgttatgc 240  
 atgatgaggg ggtcaattc attgccatag caacgtagtt tataacatac gtaccgaatg 300  
 cggaagccgc tgaaacactc gcccttcgaa ttgggtcttct tccggctgag cagccaggat 360  
 gtaacaaact gatggcgcca tggcggaatc tgattgttcc ctggttatcg atgctatcaa 420  
 cgatgctgag aact 434

<210> 6091  
 <211> 429

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-D8  
 <400> 6091

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 atgaggtgct cttttcattg tcttccttat gagtggcaga cggggacgag cgatgggtctt 180  
 ctctaccaa tctatccctc ttggggcatg cgtagtagac ttttgcaata agtatatgag 240  
 ttctttttga ctaatgtgag tccatggata taagcacact catccttcca ttttgctagc 300  
 ctttattatt accgagcaac ttctgccgtg atcatgaacc ctttatttac ctctctcaa 360  
 acagccacca tacctaccta ttatggcatt tccatagcca ttccgagata tattgccatg 420  
 caactctcc 429

<210> 6092  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-E10  
 <400> 6092

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 tccgtgctgg tgggtgcagtc ctatgggagg gcggcgccgg cggcgccgc gtcgacgtct 180  
 tctgaatttg ctgttgccga ggccgtcttg ccggcgccag aggccatcat gccggcgacc 240  
 tccatggggc acccgccaag gcgcccacga caacattcac attctgacct tatgctttga 300  
 tagtagtata gtttggtaaa gcttgctagc acattgatta attaatatt taattaggga 360  
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 tgggtgacag tcaaacatt 439

<210> 6093  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-E12

<400> 6093

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ccttcatgga caagcagaac gtgaggtctg actgcaagag gttcagacct gtgctgctgg 180  
aggcactgga caacctcaac cagtaaattt aaggcaactt gccaccatt tttaccattc 240  
gtttcgtgaa atttgatgtt cattctctca tggcgtgtat gtatgggtcta aactatagag 300  
attttgtcta ggaattactc gtgtaaactg tataaattaa attgcccggc gctgcaaaga 360  
tggaacgaaa ttcattgaaa aaaaaaagg ataatacaaa aaaaagaaaa aaaaagaaaa 420  
aaaagaggaa caac 434

<210> 6094

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-E6

<400> 6094

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ggaggccatg tctgggagct actttggcct ggtgcggcgg ctggtggatg cgtgctcgtg 180  
ggttgaagtc atcaagcact ccgcctgtat tgaaggtgcc cgtcggggcc ttgccgcgc 240  
aaaggtgcac tggggcaaga tggatgccca gaagctcgtg acggaccgcg caccagaggg 300  
caaggagcat tacacgcccg agatgtatta taagagtgtg ctgaagggcg cccgcactat 360  
tgcggtgag tgcctcaaag atgtaattt tgagtagact cgcattttgt tatcctgtgc 420  
gttgaaaac 429

<210> 6095

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-E7

<400> 6095

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cgaggaagtt cttaaaattc tggcactcaa catcggcacg gcatatgtgg tagaccaagc 180  
ataagtcacg cacgcaaacc tggatcacga cgggcttctt cctctcttca tccttttagat 240  
ccttctctcg tcccaggact atggtgtact caacatctag cccagcgacc cactcatcat 300  
ctgagtcttt gaacatgcgt ctgaagcgag aaaggcatcc tttcaccatc gcggaagaac 360  
gggtgtagat gacgtcgaac tcatcgccgg tgatggttct aaccttgtag tcaccgccga 420  
tcgtgg 426

<210> 6096

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-E8

<400> 6096

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atctccctgg gcggtgcatc tcgcgcgtct tcagctacct tctcagcctg gatccggatt 180  
ttgacttcaa caccgcgata gccccctgc ccggggctcgt acagggcgac ctggcgagat 240  
gggtggacga tcattctgac gacctgatta aggagtttgc tcttgctgac gacgtggctg 300  
cactcgcaac caaggagggc ggagccaacg atgatggcga caacgacgat atgggcaaca 360  
tcgcgtcccg ctaggcctgt acttctttgc tcttcctg 398

<210> 6097

<211> 266

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-F11

<400> 6097

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 ttcttagttt cttagtttt tctagctttg accgatgtat ggtccgaaaa tgtctgtaat 180  
 ttttaagcttt tttgtgtaac tttttcttgc tgtgtttata ttttttttct ctctatgtaa 240  
 tgacatgagc atttttttaag aaaaat 266

<210> 6098  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-F12  
 <400> 6098

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 cggaccattc cggaactcct cgtgacgttc gggatctcat ccgggactcc gaacaacttt 180  
 cgggttactg catactaata tctctacaac cctagcgtca ccgaacctta agtgtgtaga 240  
 ctctaggggt tccgggagaca cgcagacatg accgagacga ctctccggtc aataaccaac 300  
 agagtaatct ggatacccat gttggctccc acatgctcct cgatgatctc atcgaatgaa 360  
 ccacgatgtc gaggattcaa tcaaccccgt atacaattcc ctttgtcaat cgatacgтта 420  
 cttgcc 426

<210> 6099  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-F3  
 <400> 6099

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 tggcggcgac caacaccggc gacatcatgg acgcctaagc aaagcactga tccacggaca 120  
 ccaaggcgta cgtacgctgg agtttggggg cgcaagatca ataagatggc tcggtgaaac 180  
 agacgatgct tagggacgag ggcttgtctt tgtgatttgt caaactcgtg tttaattccg 240  
 atgtctgtct ttagttttcg tgtgttaacg taatttgttc atgccacctg accgccatgt 300

gctctgccct gcctctacct cgcggcaatt ccatggagga tgaaaccttc tggaacatga 360  
ggaggaata aa 372

<210> 6100  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-F6  
  
<400> 6100

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atggtgacaa taaatgcaat aaaacatagg tgtgaataac atggttaaata tgaacttacc 180  
tggttaagttg atgaagatgt taacgctctt ggaaactttg ataaactatt cgttactcca 240  
agaaaatcta tatagtcaaa cattgcattc acataagcaa caatcctagc aatcaattat 300  
accaatcaaa aagcaataaa taaagcaata atgatttcaa agaaaatcaa ataaaattcc 360  
aaagaaaact ctaaagaaaa caagggcgaa accaactcac agaatatcaa tcaatactcg 420  
cataacaact ctaaact 437

<210> 6101  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-F7  
  
<400> 6101

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ccttagcaat cgctaaacca actccgagag gttattgacc acgccggagc acgattaacc 120  
tgaccacgag ggtctgtttc ctgagagcaa acgaagaaca agcaagaaac tgagattgca 180  
atctggatat tgcgaatata agatgaaagc tttattgatc aaggtgggggt tctgtgacgc 240  
ctttgtctgg tcgttgaaca caaacgaagt acgcgaagtt gcggctatgg cgaactttta 300  
atctaaacaa aacccaaagt ctaaagcagc ccctaagggc tgtatatatg gaggaagagg 360  
gggaatttcg tggcccttgg ggaaggggtc cgaaaccaac cctatctctt gtttcccc 418

<210> 6102  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G1

<400> 6102

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ctcgttgttt ttgcatgcta gcaagtgact ccgggatgcc agttttaaga tttcgcttgt    120
gttgaaagat attattatta ttactgcttg tagcctacct gggataccgt catattttgc    180
tgattatgga acccctttta tcctgcttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagga aaaaaaaaaa aaaaaaaaaa    300
aaaaaaaaagc ggccgccta aaggttccaa cttacttac ccgtgcatgc aacgtcaaac    360
cccttctaaa gggtcaccta atttcaattc                                     390
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<210> 6103  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G10

<400> 6103

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ccttcaagag gcagcagata agtaccaaaa caccaacttg tatctgaaga acttagatga    120
tactgttgat gatgaaaagt tgcgagaact ttttgctgag ttcggaacta ttacttcctg    180
caaggttatg cgtgattcaa atggcgcaag cagaggttct ggatttggtg cttttaaatc    240
cgctgatgat gttcccagag ctcttgctga aatgaacaac aagatgggtg gcaataaacc    300
actttatgtt gcactcgcac agcgcaagga agacaggaaa gctaggctgc aggcacagtt    360
ttcaciaatg cgtcccgttc caatggctcc aaccgttggc cctcgatatgc aaatgttacc    420
tcctggtggt ccagtcggtc aac                                     443
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<210> 6104  
 <211> 436

<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G11

<400> 6104

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aattgtggaa gatgatgcac ttgatgatga tctcgttatg cctattgctt gttgtgatga 120  
ttattattgg gaagataatg atacttttat gatcttgaaa atctttttgg cacttgcttg 180  
gaagaatatg ataattgcta tactattggg gctatccata ctattaatga tgagagtgat 240  
tatgcttatg atatgaaaag gaccaagctt ggggatgcta tgtttgatga gagtgacatt 300  
tttgagaata tattttctgc aattaatgtt tgtcccaagc ttggggatgc tacgtttaat 360  
gaagatgata cttttagtct gccaaagttt gatatgcaaa tttataatga tgatagaatg 420  
cctcctactt atgatg 436

<210> 6105  
<211> 471  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G3

<400> 6105

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aaatattggg gccatgcgta gctatcatca tgggtagcaa gttatttctc tatgcacaat 180  
gccttcctct caaagtctgg ctctttttgt tttgcgaggg aaagtcttgc tctttttaac 240  
gggcaacgat gcaacgactc cttatgcgat acacaaataa gtgtaccccg ctaagctcgc 300  
acgtatacca caactcattc actctattgt caaatTTTca cacactatac tagaagttta 360  
ttttaaaaag aatgcctcgt tagcactagt aattctgtta ccaaatgaat gtacatcctc 420  
ctttagttcc tccaagtcta acaaaacttt cccgtaaaaa aatgtcatat c 471

<210> 6106  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-047-Q1-E1-G7

<400> 6106

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cacggacgag tcattctttca acaacatacg gaactgggta cgcaacattg agcaacatgc 120  
ctctgataat gtgaacaaaa ttttgatagg caacaaggct gatatggatg agagtaaaag 180  
ggctgtttct actgcaaagg gacaagcact agccgatgaa tatggcatcc agttctttga 240  
aactagtgcc aagacaaacc tcaatgtgga gcaagttttc ttttccattg cccgagatat 300  
taagcagagg cttgctgaga ctgattccaa gcccgaggac cggacgatca agattaacaa 360  
gacagaaggt tctgagaatc cagaatctca gaaatctgcc tgctgtggct catgangagt 420  
a 421

<210> 6107  
<211> 438  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G9

<400> 6107

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agacatctct agtcaattca attgctaccg gtggatacag cgaggacatg attccaactg 180  
taggctttta tatgcggaaa gtcaccaagg gaaatgtcac aattaaactt tgggatcttg 240  
gagggcaacg tagattccgg actatgtggg agcgctactg tcgtggagtt acggctattc 300  
tatacgttgt cgatgctgct gaccgggata gcgttccgat tgctaaaagt gaattgcatg 360  
acctgctgac aaaacaatct ttatctggga tccccttact tatecttggc aacaaaattg 420  
acaagtcaga ggcacttt 438

<210> 6108  
<211> 423  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-H3

<400> 6108

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agacatattg ttttaagaga ttatctcatg tcttctctta aataagagaa gacaagcatt 180  
ctcttagggc atgtaaaatg gttgataaga cagtcttatc ttaagtcttg catgtaatta 240  
gaggcgaccc attaggtcat gtacaatggc tcataagata gtcttatatt aagtcttgca 300  
tttaatttag aaatgacaaa aaacatgtct acaatgggtc atctcttagc cttatcttca 360  
ataataacta gctatttcta aaaatgtggt gagacatatt gttctaagag attatatcat 420  
gtc 423

<210> 6109

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-H5

<400> 6109

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa gggggccccc ccaaagggtc caattttttt ttcccttcat tcgcactcca 240  
aacccctccc aatggtcccc ccaattttat ttccagggcc ctttttttaa aacctttttc 300  
cgggaaaacc ccgggggttc cccaatttaa ccccttttga aaaaaccccc ttttcccaa 360  
gggggtttta tccaaatggc cccccccctt ttcccttcc aaaaattttc cccc 414

<210> 6110

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-H7

<400> 6110

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 gctcaaattt gtgggctcta ataatggatg ctggcactgg ctttacttct caagtctatg 120  
 aactttctcc atattttctt cacaaggaat ggataatgga gcagtgggag aagaacttct 180  
 atatcactgc gtttagcaggt gcaaacaatg gtagttctct ggtgggtcatg tctagaggaa 240  
 cacaatatgc acagcaatcc tacaaagtag gtgactcggt tcccttcaag tggataaaca 300  
 agaagtggaa ggagggtttt tacgtcacag ctatggccac tgcaggaagc cgatgggcag 360  
 tggtcgtgtc ccggaatgct ggctttgtag atcaggttgt ggagcttgac 410

<210> 6111  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-H9  
 <400> 6111

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 aatggatgtg atgaagaaaa ccgtgagtgt actagtagcc gaacgagatg cagctcgggc 120  
 gcagcatgaa gatcatccag cggatctcag aagccagcag cggagaagca gtgtggcttc 180  
 cacggaggcc ccacctgctg gtgcagatgc accgacgac gaaattactg caccggagcc 240  
 tctggtggtc gaaattactg caccggagcc tctggtggtc gaaattactg caccggagcc 300  
 tcctcgctac cccgtggacg atataaagga gatgaaagaa tgtcatctgt attatcctat 360  
 cgggaacatg tccatgaagg tagccatcgg cagtgcctta ccatgtttac ctggagcact 420  
 ccaccacaac accccca 437

<210> 6112  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-A1  
 <400> 6112

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 accgtaatta accgaattct ggaaatgagc ccaagaataa atgggccctt agaaggctga 120

aagttaacac gggctggaaa ggggtcaacgg aataatggac tgttaatggg tataaagcca 180  
 tacactattc attatgggtc agtttcacct tgggccttta gtgggcccac agttacaaag 240  
 gaccttgcat gggccgaaag acgttatggg ccatacatgg gccgaaagtt acaactgatt 300  
 gtaatcatat tggacgggtc agatgacgtt gctgggccta attcggatag gccataacgg 360  
 gccgtgagtt agcgaactgt aaatgggct 389

<210> 6113  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-A6

<400> 6113  
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 ctttcaggca aaagtataaa cacagccttt ataatttaac aaacattggt cttacaatgg 120  
 gaatacatgt cactagaaca taatattctt cgagcactga gcctctatta aactagcgcc 180  
 ttcaaggact tctttaaaagt agtgctcggc cgatactcgg cccacggctg aactctgggt 240  
 cgcaatagcg gtggcctcca tctctgcca gtatgtcttg acatgggcca gagccatccg 300  
 cgcaccctct atgcacgccg acctcttcat agcgtcgatg cgcggcacag caccaaggaa 360  
 ctgttgcaact aaactaaaat aactattcgg cct 393

<210> 6114  
 <211> 201  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-A9

<400> 6114  
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 aaaggaaaac aaatcaaagg ataaaaagga aataaaaaaa aaaattttta aaaaaaaaag 120  
 cgggcgcccc aaaagatgta aacttaactt tacctgcaat gaaagttaaa agccttccaa 180  
 aatgttaacc aaaattttatt t 201



<210> 6115  
 <211> 294  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-B11  
  
 <400> 6115  
  
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 tgcagtggga tttgtagggg actatgctgc gctgtgtttg ggatttgaaa tagaacgatg 120  
 ggagatgtgc cacgctctta aaatcaaaca cataaggcaa aaaccaatag caaatgtgcc 180  
 agccaaatct gcaacatgca tgcacataaa aaattggccg cccatcagga tctaaactaa 240  
 cttacgcgtg tatgcgaatt catacccctt cgatagaggc acctaaattc attt 294

<210> 6116  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-B5  
  
 <400> 6116  
  
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 tgtaggggtt ttcacgagtt tgtaggtagt tcatcctcgt tcttcgctgt agcttgtaac 180  
 ttttgattca gacttagtac cctcctacgc ggcggtagac atggtaatca tttttgttat 240  
 tagaacatct cctttgcgta agaaaaccaa tctggacaca tgaactgctc acgtactgca 300  
 acttaggtct aaatattttc cattctctga agtgctgtag atccaaaatt gtagcatcaa 360  
 tctgtgaaat ctgtntttcc aacacttagc aattttccca ttctcagatc tgtgaaatta 420  
 atatttggtg gtg 433

<210> 6117  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-B8

<400> 6117

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tgctgttagt agtacataga taggcctgta atttgtgaca ctaattcttt ttctctctct 180  
ccccgatgcc aacggcaaag ccttggtcat tattaccaat acgaactaca gactgcttgt 240  
agcactagat aagacttggtg tattcgatat ttcgatccct tgagttttga tggccatttt 300  
cactgggacg ctcaaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa aaaaacaaaa 360  
aacaaaaaaa aaaaaaaatt caaacia 387

<210> 6118

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-C12

<400> 6118

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gatccttgct aacaactgcc ctccactccg caagtctgag attgagtact atgctatgtt 180  
ggcgaagatc actgtccacc actaccatgg aaacaatgtt gatttgggaa ctgcgtgtgg 240  
taaatacttc cgagtctgct gcctgagtat catcgacctt ggcgattccg acatcatcaa 300  
cgcaacacca gctggccagt aaacctgtgc atgccatttt cagtgtctcg tctgatgcca 360  
ttttcttgct ggacttgatt tggctctgtg tacatcattt atcagtcaat caagtttgat 420  
ggga 424

<210> 6119

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-C6

<400> 6119

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 ggagttcgat ggcgtgttaa ggggtgtgtc cccgtctgat tcgttcaacc gcaatggctt 180  
 cacttttggg gagccacctt gaaagtcctc aaagctgcat atcagtgatg gcgccacgtc 240  
 gagttaaggt gaggaggtga tccgtcattc tttcttcgg tggctgttgt gatgggtgcag 300  
 gaggcaggtg acgggcattg acgtcaagct caaagatggt ctactatctt ttcagttttg 360  
 tcatgtaggt ctttacatga cttgtatttt gttcaatatg atatgaatga aacgcgtatt 420  
 gccaaagaaa agaaacattc cttgataaat attaatt 457

<210> 6120  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-C8  
 <400> 6120

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 gtgccgacag gctggggctt ttcctaatgc tgtgcacttg gacgagctga acatgctact 120  
 aagctatagt tgtccggagt actgggagaa gagaatgcag atggaacgag ttgagcgtgt 180  
 tcgtctggct aaggagcact gggagtccca gtgcagagca ttcttgggct tctgatggaa 240  
 catgtagact tcgtacaaaa atgggattcc ccattgctgt tggttagatc ttgatttggc 300  
 atgactgtaa tatatttgta tctatcctgc tgaatgaatt ggtctgtaat tgggaggtca 360  
 cttgtgcgcc tagatgtaaa aaggggtaaa cttgtagtga ttatctgaat gtaaaattgc 420

<210> 6121  
 <211> 176  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-C9  
 <400> 6121

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 tatatcacca caacaatgtg ctgcgtatta gcattaatga gttccgtata tcttgagacg 120

aaaaanannn nnnnnnnnnn aaaaaaaaaa gcggccgctc tanaggatcc aagctt 176

<210> 6122

<211> 276

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D2

<400> 6122

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gtgttatgaa taacaaacag attaaacaaa cccagaatga cagtggcaag attacttta 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaagcggc cgctcaaaag gatcaaagct aacgtacgcy tgaatgcaac 240

gtcaaagctc ttcaaaagtg tcacccaaat tcaatt 276

<210> 6123

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D6

<400> 6123

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atctaatacg tccagtgac agctgattga tctaggttca ctaacaggac gcgagaggct 120

atggaagtca ggtttgttcg tatggataat gtttgggagc agtgataatc gatgagacgt 180

taatctcaat atgtacgata ataattcctc aagatataag tgtaattcca aaatattatt 240

cgtaaggaac ttaaaaagat gccctttgat ttgagaata gtgtgaaaga atttatgatc 300

tcggacgata attttaatgc attgctagat gaacaattgc gtacagttaa agatttgat 360

aggaacgtct atataattc gattga 386

<210> 6124

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-F10

<400> 6124

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gtcagcgaca cggacgcctt cttcaccgcc gtcgtgcct ccaaggccaa cacggacctc 180

ccccgcttca tcctcggcga gtccatgggc ggcgccgtgg cgctgctcct ccaccggatg 240

cgcccgcggt actggaccgg cgccgtcctg gtcgccccca tgtgcaagat cgctgacgag 300

atgcggccgc atccgggtgt ggtgagcgtc ctcaagctga tgaccaacat catccccacg 360

tggaagatcg tgccgaccac ggacgtcatc gacgccgcct acaggatg 408

<210> 6125

<211> 455

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-048-Q1-E1-F5

<400> 6125

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tttccgcaag atgtcatggc gcttctccat gcateccggc caaccactgg tttctccagg 180

gtgcccgtca accgtccttc acccagtact gtgtattgaa ttcttgtctc gagtctcgaa 240

atcttgagga gtctgaaga tgaagtcctt gcagatgtta tcatgaagtt gtcgtctttg 300

acataaagcc cttcattctc acaccactcc cgagcaatca taccaaacc cgtctactac 360

agcgtagcat taanactata tacgtcccgg gcttggtaac acggaggtgg gttcctacct 420

catgcattct actcaactac aagaatcaat atcat 455

<210> 6126

<211> 454

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-F8

<400> 6126

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tcccacctgg actaaatacc ggatggaatt gaagcgtctc ttgatgtgct tggttctctt 120  
 gtgaaatctg gattccttcg ccaaggtaat tgcaccagta ttgtcgcaaa agattttcat 180  
 tggacccgat gcactaggta tgacacctag atcggatatg aactccttca tccagactcc 240  
 ttcatttgct gctttogaag cagctatgta ctccgcttca cacgtagatc cgcgcacgac 300  
 gctttgttta gaactgcacc aactgacagc tccaccgttt aatataaaca cgtatccggt 360  
 ttgcgattta gaatcgctcg gatcagcgtc aaagcttgcg tcaacataac catttacgat 420  
 gagctctttg tcacctccat aaacgagaaa cata 454

<210> 6127  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-G10  
 <400> 6127

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 tacatcgacg ccaccaaccg gcgcggcgac ctacactacg agctcggcga gaatgagttc 180  
 gccgacctca cccaggagga gttcctagcc aggtacgctg cgtcctacga tggggtcggt 240  
 gatgatactg gcatcacgtt gcctgtgggc ggtggcgacg ccgagctgtg gtcgtccggc 300  
 ggcgacaatg atagctcctt ggaggctccg cctcccagct gggactggag atccaagggc 360  
 gccgtcacac cgggtcaagtc ccaaggcgca ggatgcgcta actgctgggc gtt 413

<210> 6128  
 <211> 156  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-G2  
 <400> 6128

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 acctaaatgt aactgactgg acgactttat agatgt 156

<210> 6129  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-G5  
  
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tgaaggacgt cgccaaggtc ttctgaatca gttcatttca cctcagccgt ccgttccagg  180
agccgatcca tctacgtacg gcttcgtata tcaatttcat gcaactacct actccggtcc  240
cgatccagcc tcagcttcac ctgaggcccg ccctaaattt gtttgatcaa ttcttttgct  300
actagtagta actagtgatg atcactgttg catcatttat ttatttattt tatatatcat  360
cacaagtttc ctgtgattct tttctttcta tacctttttg tcgatcgctg gctccagctc  420
gatcgaacga tc                                                         432
  
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<210> 6130  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-G7  
  
 <400> 6130

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tgaaggacgt cgccaaggtc ttctgaatca gttcatttca cctcagccgt ccgatccagg  180
agccgatcca tctacgtacg gcttcgtata tcaatttcat gcaactacct actccggtcc  240
cgatccagcc tcagcttcac ctgaggcccg ccctaaattt gtttgatcaa ttttttgcta  300
ctagtagtaa ctagtgatga tcaactgtgc accatttatt tattttatat cgtcacaact  360
ttccagtgtt tcttttcttt ctctaccttt ttgtcgatcg tcggctccag ctcgatcgaa  420
cga                                                                    423
  
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<210> 6131  
 <211> 254  
 <212> DNA  
 <213> Triticum aestivum  
  
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 <400> 6131  
  
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 gcatgatgga gaagatcaag gacaagatca gcggcgacgg ccacggcgac ggcaagaagg 120  
 acggcgacca caaggagaag aaggacaaga agaagaagaa ggacaagaag cacggcgagg 180  
 gccacaagga cgacgacggc cacggcagca gcagcagcga cagcgacagc gactgagcca 240  
 gctccggccg cget 254

<210> 6132  
 <211> 162  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-H11  
  
 <400> 6132  
  
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 tctttttatt gacaggggtt ttgatttggt tgatgaaaag aagaatggag taatagagtt 120  
 tgatgagttt attcatgctc tcagtgtctt ccatccatgt tc 162

<210> 6133  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-H5  
  
 <400> 6133  
  
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 tcatccccgt ttcttgcatg ggacataagc ataaacccat ggacacatat atgattttac 120  
 aacccatggt ggtgtaccgg agcatgtgca tgtagtttaa ttttgaattg tgcacctgaa 180  
 atggctagaa aaccaattta atgtgtaaaa tgttcaaact aatcctgaat aattccattt 240  
 cttttacgac acacatatat ttgcttggtc actgtagata aagggctag catttcaaac 300



accgtccatt gccgctgtga ccccattatg taattcaact caagatgaaa actcatgtat 360  
atccccacaca tttta 375

<210> 6134  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-C10  
  
<400> 6134

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acttttgcaa taagtatgtg agttctttat gattaatggt gagttcatgg attatacaca 180  
ctctcaccct tccaccattg ctagcctcta tagtaccgcg caactttcgc cggtacatta 240  
caccacccat ataccttcct caaaacaacc accataccta cctattatag catttccata 300  
gccattocga gatataattgc catgcaactt ccaccgttca gtttattatg acatgcttca 360  
tgatgaggac atcaatacca ttgttacacc cacatcccct gctactatac ataatggacc 420  
aat 423

<210> 6135  
<211> 364  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-C8  
  
<400> 6135

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aaggttgact ggccttgaaa aaaaagtac cgggtgagat ggccggctgc ccgagagtcg 180  
gctggaaaaa aagaagaaga aagaaatgtg cgtctgactg tcagatgtgc gtccgaccgc 240  
tggctgcctg gccggctgca aagagcgcga ctgttgtgtc ggggtctgcc tgcccagccg 300  
gctgaggaaa aaaaaaaaaa taaaaaaaaa aaaaaagcgg ccgctctaga ggatccaagc 360  
ttac 364

<210> 6136  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-049-Q1-E1-D5  
  
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 acgcgcacgc ctccggccccc gacctcccac cgtaatcagg aactcgccga aattttcgtc 180  
 cccctcgctt ctacgcacgt tttttccgtc agggacgac gacagaatgt catgcagctg 240  
 catctccggc ccgcccagga taaaaagccc attttctgtc atgatttttt tggtatatca 300  
 gtaggagccc accacatcta tgatgatacc gggttttgtc acaattatca tcatagaact 360  
 gtcatatgta tgacaggaaa aaatttcggt cgteccca 397

<210> 6137  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-049-Q1-E1-D6  
  
 <400> 6137

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 gaatcatgga tcacaaacac agaactcagt tcctaaggac ggcttcaatg agacaacca 120  
 ccatgtactc ctacatggac tctcacgcgt acctttacca aatcgtgttc acacacttag 180  
 ctcacacaca gtaggacatg ttcacacacc tctgattcat ccccgatgaa tcagacctga 240  
 ctcaactcta agcagtagca ggcacgacaa acaagcatga atgagtaggc acaacagggc 300  
 tcaaacaact cctactcatg ctagtgggtt tcactatatt actgtggcaa tgataggtca 360  
 tgcagaggat aaagggttca gctaccgcag caagtaacag atgaatc 407

<210> 6138  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-D7

<400> 6138

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agagcttggc cagagagAAC ggcgtgtacc gcagatcggg acatgctgcc tcggcaccgt 180  
caaacggaga aacgatgcac ttcctccctt tcccctggcg gacgggatgc ggccggatca 240  
gtgaccaacg atgagagaga gagaggccac cgcactccct ttcctcggc ggacgggatg 300  
cggccggatc agtgatcaac ggtgagagag agagaggcca ccgcagcctt gtgtgagata 360  
ctctgaagag cgacaaacca ggtaggcagg ctccattgta tata 404

<210> 6139

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-E6

<400> 6139

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gagaagcttg ctgtttttga tgctgctatg aaatacaaga acgaagggca tgacactatc 180  
atcctggctg gtgctgagta tggcagtgga agctcaaggg attgggctgc gaagggtcca 240  
atgcttcagg gagtgaaggc tgtgatagcc aagagttttg agaggattca ccgtagcaat 300  
ctcgctggaa tgggcatcgt ccctctatgc ttcaaggctg gggaggatgc cgacactctt 360  
ggcttaacag gccatgagcg ctacaccatc cagcttccga ctg 403

<210> 6140

<211> 327

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-E7

<400> 6140

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tgggttcggtg tgcgtaagtg ccagactgag gctgctgcc aagaagtggt tttagatacc 120  
 aaagttgcag actactggga catggctgtc aacttcacgg aagatttgct ctgagctaaa 180  
 atttctgttg atgacagtga gagcgatcgc tgcggatcac tatactttgt aatgtcacca 240  
 acatgccatt tttagacatg tggatgaattg aacgcataaa acggctgtcg gatttttgca 300  
 atatgctttc aaaaaatagc tacaaag 327

<210> 6141  
 <211> 235  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-E9

<400> 6141

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 ccggtgtgtg ccacgaaccg ggaccaatac tctgtgttca taagcaggac ttagaaaatt 180  
 tccagtttca tgcaccattt tccccgcagc acccggaat tcaggtctgg aacct 235

<210> 6142  
 <211> 328  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-F10

<400> 6142

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 aaacctgatg tattagcggc agccatggtt ttacaccatg gtggttatgg aatgacaatc 180  
 ctatgagcag catagtaatt catttgaact ttctcggatt gtttcgaaat ggattgaatc 240  
 ttacatgaag tgcaggacga tccagccaca aatatgttga cgattcaaca tggatcatctg 300  
 cacagaatac acatgctttc acaaattc 328

<210> 6143  
 <211> 297

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-F11  
 <400> 6143

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 aacatcatgg atgttcctta ctctgcattc cttaatcttc attctgcatg tataatagcg 120  
 gacacaacaa tatagttagg acatatatat agtgcaagca atatgaacga gatggggtag 180  
 aaataaatca cttacagaac gtaacaactg atgatagatt tgtcgagctc gcgcaaattg 240  
 aaaagctgga acaattcact cagatgaatt tgtacatagt aatgtttgaa gtgatgc 297

<210> 6144  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-F5  
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 agttttatata ctttgtagag gtttgccgac ttttccccac aagacttgat ctctccggtt 180  
 gggattttcg cactacatga tgtttgagaa acagatgacc gagacatact ctttcaaaac 240  
 tgctagcacc ttacgatcgg gtagacagta ccacccatac tcccctacat ctgctagtct 300  
 accactgtaa gagttcgcat gacttagtca actatgctag agaccatagt agcttgtggc 360  
 tgcacacgga agtttctagt atgaataatc tcatgatccc tttgagcctg ggtgg 415

<210> 6145  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-F6  
 <400> 6145

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cgcgatcctg tcggtgtgct ggaatggcac aactcagtgg caccaatatg cacaacagta 180  
gacacttaca acacatctgt gtgaccgagt agttaacttc ggttgcacca atattgaaca 240  
tctacataga cgtaatgata actgaggcac cgacaatcga cgaatcgggtc acacacgata 300  
atca 304

<210> 6146  
<211> 399  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-049-Q1-E1-F8  
<400> 6146

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tttagtgctt tacgaaagat tgacaaggac aagatggcca tggcgttggg gtccctgcag 180  
acaagtaatc caactatttc aagtttccag tgcacacagt ccttgagtca ttcattctgaa 240  
ttatcatgcc cttctcgaat atcaacagga tctaccctac cttccaaaac tactaaggaa 300  
ctgtttggca ttgagactga atactgtgtg gccaaaggctt catgtgcca ggtagtcaa 360  
ctggggaaac cttcttcaag tcaatccaat gaagtctcc 399

<210> 6147  
<211> 393  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-049-Q1-E1-G2  
<400> 6147

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tggagaagcg tccacgtggc ccgccgtggt gggcgtggtg cgttggaggc gtgagaggcg 120  
aggtcgtgac atgcttcgtg cgcggacaac gcaacgcaac gcaaacagtc tcgccgttgc 180  
cacacacgtc actgtgtacg gactgtcaac ggtcaacgtt tgtaagagtg gagatggtgc 240  
gcttttggaa aatcgagtgg tgcggtgttt gttactttct ccattcacag atataagatg 300  
ttctattatt ttactttttt tcgattcaga cttatttaaa cacatttttag agcccgttg 360

aaatggatgt aagtttatac acctgtatatt att

393

<210> 6148

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-G4

<400> 6148

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tggagggggag gggaatataa agggacaaag ctgagtggtta actgggcccgg gcctcgctgc 180

gtaagaaggc cggagtgatt tctcccggtt tctttctttc gttctcttgt tctccttttc 240

ggcctgcaaa gaaacaattc ggtcttctca aaagaaaaag aaaaaaaca ttcggccccc 300

tcaaaaggaa acatacaaat gtctcaaaga caatacaaat aatttggaac cgccttttca 360

gtgcgtcgtc tgagtaggac ttgccggcgc tgccaact 398

<210> 6149

<211> 392

<212> DNA

<213> Triticum aestivum

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<400> 6149

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gtgcgacctc gagtcccaag ccaacgccct cagcaagatc cagaccgaca tctccaataa 180

tcactaggtc cgcattgcagt tcaccatcca ggtcggcgag aatgaactcg tcctcacgga 240

gctggagctg ctgaatgaat gggctaactg gtacaagctg atcgggccag tgttggtcac 300

acaggacaat gcggatgcta atgccaacat caaaaagcgc atccagtaca tcacatctga 360

gctaataaaa acggatcggg cgcttaagga ct 392

<210> 6150

<211> 400

<212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-G7

<400> 6150

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atcgggtgggt ttgttggtgc aagacgcctt gacagacaag ggcccttctg tgtggactgg   180
tggtgccggc gttctgcaat gtgttttctg gttgataagc gggttgacat actggacgtg   240
ccacaccgag gattaagggt caaaaatctc gcgaagacag acgtctagtc tatacccggtg   300
tgtggtcctg tgtaaaaaaa tatgttcatt ccagggcggg attacttggg gtccgtgtgt   360
gcatagtga  ccgcttcctg aaatggaccc ctagcatcag                               400
  
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 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-H11

<400> 6151

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agttatcaaa gcaaagtatt acgctcatgc tcctaggggg atagattgct atgaaaatac   180
catcgctcgt ccccgaccgc cattcataag gaagacatct caataattaa atcatgctcc   240
aacttcatca cataacggtt caccatacgt acatgcaacg gaaatcacia cttttatcac   300
aagtacctct caaatcaca actactcatc taccatgact caaatatcac catctttaga   360
cctcaaaaca attatcaacc atcaaacttt tt                               392
  
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<210> 6152  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-H12

<400> 6152



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 gccaatcttt ttgcatttca aaaaagaaaa aaacaaaaaa gttaaaaaaa aaaaaaaaaa 120  
 aacacaagaa ccaaagggg aaaaaagca aaagaaaaaa aaaattacac aaccaaaaaa 180  
 gaaaaaaaaa aaagaggggc cgcccaaagg gttccaagtt tacgtccgcg tgaaggcaag 240  
 gtcaaaccct tccaaaagg ccccaaatt ccaatccagg ggccgccttt taaaaacgtc 300  
 gggacgggaa aaccccgggg gtaccaatc taaacccct tgcaacaaac ccccctttcc 360  
 caaccggggg tattacaaa aaggcccccac ccgtttcccc ttccaaaag ttg 413

<210> 6153  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-H5  
 <400> 6153

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 cgacttgtca attttatttc tcatgaaaat agcaagttaa ctcaaagaat ttatcacaca 180  
 aatagtcaat ttgttagaac ttgcttagta gtgaattggg aacaagaaga aaaagaaaag 240  
 gctgggtgctt cccttggtga ggtaagagca aatgatctta ttcgcgattt cctaagaatt 300  
 gagttagtca agtcactat ttcgtataca cgaaaaaggt atgataggac aagtgcagga 360  
 ccgattcccc ataataggtt agatcgcgcc aatatcaatt cttttt 406

<210> 6154  
 <211> 186  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-A12  
 <400> 6154

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 aaaaaaaaaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgcccaaag 120  
 gttccaagct tactttcccg tgcattgcaac gtcaaaacc ttccaaagtg tcccctaaat 180

tcaatt

186

<210> 6155  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-050-Q1-E1-B12  
  
<400> 6155

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ggatgccccg ggaaggcatc ccctctttcg tcttcgttca ttggtaactt tacttggagc 180  
tatattttta ttogccacat gatatgtgtt ttgcttggag cgtcgtgtat tatattagtc 240  
tttgattttt agtttaccac aataatcttt gatgtacaca ctttttggga gaagcctact 300  
tgattagaat ttgctagaat actctatgtg cttcacttat atcttttgag cttgatagtt 360  
ttgctctagt gcttcactta tatttttgag agcacggtgg tgatttaatt t 411

<210> 6156  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-050-Q1-E1-C10  
  
<400> 6156

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taaaatccta cataaaactt gtagatcact gaatatgata tgtttgattc cttgcaatag 180  
ttttgcgata taaagatggg gatattagag tcatgctagt gggtagttgt ggattgtaga 240  
aatacttgtg tagaagtttg tgattcccgat agcatgcacg tatgggtgaac cgttatgtaa 300  
cgaagtggga gcatgaggta tttattgatt gtcttcctta tgagtggcgg ccgggggacga 360  
gcatggtctt tttcctacca atctatcccc ctaggatcat gcgcgtaata ctttgttt 418

<210> 6157  
<211> 371

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-C12  
  
 <400> 6157  
  
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 gtaaatatgc attgttgtat cgcgacctga atgaaataaa cgaaataatg ctcttggtca 120  
 atcggcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaca 180  
 aaaaagaaaa aaaaaaaaaa aaacataca ggcgactcca aaggactaat acatagttac 240  
 ccaaataata atacatcaaa cctcgtcaat agaagccacc taaatgcaa taactggccg 300  
 ttattaaaca acatcgatcat ggagaaaaac ctgctttcac caactgtagt agtattgaaa 360  
 aagatcccac t 371

<210> 6158  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-D12  
  
 <400> 6158  
  
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 gaggcgtggt gagtgtcagt gtttattgtt actggaatgt gagcgtggca gaagtagaaa 120  
 gccggatcgt gaatggtacg cagagcacia cggggttccg tccagttttc gttggcgctc 180  
 ggagggatct ggagagacta ggggaggatc cctgggcccg ggcttagtgc tttgatcagt 240  
 gaaagtacgc aacaagaaat catggtttga acaattatgt atcacaacia attaatattg 300  
 aggacaacia atgcaaaagt cttaactca caggactgag cgaccagccg ggaggctctt 360  
 caaggtgagg gattactgca agaccataac taatcccctt g 401

<210> 6159  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-E12  
  
 <400> 6159

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gctgctgaca taggcacaa cagccgaagc ggtgggtgctc cattttgtca ggtttctagg 180  
acaagtggct ggaatgtcat actgctgggt tgctttgtct tcgaaatggt tgggatagta 240  
ccactttgtt gtogttgtag tgctgatatt tctgctgta gctgtttgta ggctgggttac 300  
ctgcatgtgt tcttcgagtt gtctgataac cggcgacat tgtggttgc gctacttgct 360  
gcgttgtgtc tttgtgtggt atcttactgg agttgagatg ttatctgttg cgttgtg 417

<210> 6160  
<211> 318  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-E5  
<400> 6160

tccccgggtcg acgggatgc gaatcgctac gtctccgtcg gctacaagga aatctctgtt 60  
ggacaggagt acaacaactc caaggacaat ttccccaaga aatgcacatt agcgaaggtc 120  
aggagaatgg cgaggttcat catcgacaat aagacgacca ttaggatcgt cgatgtgaca 180  
acgatgatca tgacgacgat tgccaagatc acaatgcagc cgaccactat gataatgatg 240  
atctctctgc cgtctaccat ggagattgac ttcactacga tgattatgac tattaagaat 300  
aagaggaaaa ttacgact 318

<210> 6161  
<211> 405  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-E6  
<400> 6161

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caggggagac gtaggatggg agttcggccc cggcgaactg atagggagga tagtgtacgg 120  
cgaactgtct atgtctcaga cattgatcaa catgtcactg aacagaaact tgctgaggtt 180  
ttctcaaact gtggtcaagt ggtagattgc cgtatctgtg gtgatccaaa ctcaagtatg 240

cgttttgctt ttatcgagtt cgctgatgat gtcggtgcaa gagcagcttt aacgcttggt 300  
 ggaaccattc ttgggttttta tcctgtcaga gttttgccat ctaagactgc tattttgcct 360  
 gtgaacccca aattttcttc tcgaacggag gatgagaaag aaatg 405

<210> 6162  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-F10  
 <400> 6162

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 aacatcggcg accagctgga ggtgatcacc aacgggcggt acaagagcgt gatgcaccgc 120  
 gtgctcaccg gccccgacgg caaccgcatg tccatcgctt ccttctacaa ccccggcgcc 180  
 gacgccatca tattcccggc cccggcgctc gtgggcgccg ccgacgctgc tgagagggaac 240  
 gagggcgagg agggcaccgc cgtgtacccg aggttcgtgt tcgaggacta catgaacctg 300  
 tacgtgcgct acaagttcga ggccaaggag ccacgggtca aggccatgaa ggcagacgcc 360  
 gcgcccacgc ccacgcgtg ataacgcgcg gc 392

<210> 6163  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-F12  
 <400> 6163

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 aagtttgtgc ttactaaggc ttatattgat gggttgcctt ttaccattac acatgatgat 180  
 tttgatagat ataatatgca cgtgcttgct gctcctactt gcaattatta tgagagagga 240  
 actatatctc cacctctcta tgtttccaat atgataaaat tgcaataaac tgtttatatt 300  
 atgcattggc ctttactatg tgtgcatgaa ttgttctttt atgacatgcc gatgcatagg 360  
 aagagagtta gacttcgttg ttgcatgata tatgttactt tgtgctcact actaaat 417

<210> 6164  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-G10  
  
 <400> 6164

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 aatatggcac aggactttat tatcttttta atgtgacgaa gaactaatgt agcgtagttt 180  
 agccaggatg tatgactgtt atccaaagag catcaatgaa gagctaaaag gtctattgta 240  
 ttccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
 aaaaacacat attggat 377

<210> 6165  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-G11  
  
 <400> 6165

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 ttgcatgtc cgggcgccaa gcggccgtat cggctcggct gtacgcgtct gctgacgtca 120  
 cgtaggggtg tgggtatatg ctatgcatca tatgcccaa atgcccttag acatgggggg 180  
 taccgaagca aacctcattg ttcaaatatg tccaggttgt tgcgaaccc ttatgttggg 240  
 agaatatgag aactctaggc caaattagcc ttcgactatc tatacctaatt attataagac 300  
 ggatcctttc atagtcttct atctatcgt cttttgtatc cgttgatttt atgttaacaa 360  
 agatattaac ggccgacatt taaaact 387

<210> 6166  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G12

<400> 6166

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ttgtgtgaaa gtatgctaca ttgccccgct tgataagcaa gtaatactca tcctttcatc 120  
tatgcatggc cgtttaactc ttgtcttaaa aaaaaaaat gaaaaaaaaa aataaagggg 180  
aaaaaaaaaa aagaaaaaga aaaaaaaaaa taaaagtaga aaagcggccg ctcaagagga 240  
tacaagctta catacccatg catgcaacgt catacctctt caaaaatgta acctaaattc 300  
aatt 304

<210> 6167

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G6

<400> 6167

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gtggatgagt cagatacaag gctcttacat gaggaaaaca aactcgatat cacaaaacga 120  
caacacactc ctattggata tgagggtggca tgcaagaatc caagcatagc tcaacgttca 180  
tgggtgacctg gagaacatcc tgaggctgga gggatatcga attcctcctg ggtctgataa 240  
cagggtgaatg cagtaaacac cataaccatc agtactatga tctggaacaa tatcatgaat 300  
aaactatattt ctggattatg aatgaattct gaaacatggg gctataagtg aattatgttc 360  
catggatttg taactatggg gaatgtcaag ttaacgttcc atc 403

<210> 6168

<211> 334

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G7

<400> 6168

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aaatgagatc gatgcagatg attatggtaa atgggtcatc gtcgggaaat caacctgtat 120

atgacaatca ggcaacacgc ccctatttca tatgaggcag cacgtcagga tccaagtcta 180  
 gttcaacgtg catggtacgt cagaaatcat ccagaggctg aagggatttc aagtcactcg 240  
 atggtccttt taacacgtca ttacagtga caccaatata tttctgtatc ataatcagga 300  
 agcatatcat gactcctgca caaactggat tatt 334

<210> 6169  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-H11  
 <400> 6169

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 tagaacagga cacgccccca ccgaccggcg gcgaggaaga ggaggaggac atggcgggcg 120  
 cgcgggggca aaaggcgctg gcgacgctgg tgaggctcgt gcggagcgat tccatctcca 180  
 actccaacgc tcccaggctc aggcacctcc cgtctctcat gaggaccttc tcgctctacg 240  
 accatatcaa cctcatcgac accgtccccg aagaccagct ccgcttccaa acttacgatg 300  
 aactggatt catgattaac aatgtaaagt atgaaggag cttgctgata gtagaaaaca 360  
 agataatgac ctggacaccc aaaacatttg cggatataac tgctgaaa 408

<210> 6170  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-H9  
 <400> 6170

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 catcctagct acagagatgg tgtgcaagtc tttgcattcg tggatccgca gcgagttatc 120  
 gtggaagtgt atccacattg aaccggtatt gagcggaag atctctgatc ctgatcgtct 180  
 atttctgaca cagaagattc caggtgattt gcagtgctta aatataaatg actgcataaa 240  
 tatcaccgac aatggtttga atgctgttct ccaaagcaat ccgacgttaa caaagttgag 300  
 tattgcacgc tgcccgcggt taacttttga tggccttatt gccaatctaa agtcatttaa 360



tatgaaagca gtgtcgggta ttaagagcct cagaattgac aaaaa

405

<210> 6171

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-B10

<400> 6171

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acgatgtgct ctccgctgag gacggagctg ttgcggccgc tccgctggc gctggtgaac 120  
cggggccccc acgaggagct gctggtggca aaccggtgg aggtgtccgg gaagggtagg 180  
ccgctggtgt tctatgacat caccctcgcg ctcaagaacc tccatagacg agtcttcttg 240  
gccgagatcg ggaggcatgt ggtggacgac agggagtggg aggtgtacag ggtgcacctg 300  
ggcgaggacg accacgagct ctctgctcg gtgcggagca agattgtcga tggcgtcacc 360  
aacatgctca tgggctggga ctgactgacc gactggtcac accatgcac ttccttgaca 420  
tattcagtct tgttgcaaa 439

<210> 6172

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-B12

<400> 6172

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ctaattcctt acggtttaag agcagtttcg attttaccga aaagcggaca ctctgttctg 120  
cgcgagacca aaatcgtcgt atgtactgca tcggacagaa gaacgcattg cttcagacaa 180  
acgcattgct tcagacaaaa taccgactg catcagatgg gcaagtgcac tgcattggtt 240  
ctttttgttt aaacgtattt tttgtcggac gaggaagaa gaacgcactg cttcagacga 300  
aataccgcac ttcacacaa gagacaagtg cactgcatga ttttttttgt gagatgtaaa 360  
ttttccata cgagtttttg ttttgttgt ctttttttca actttctttt atgaacgaga 420  
agtggacgca aagacaaggg gaaat 445

<210> 6173  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-051-Q1-E1-B8  
  
 <400> 6173

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 agctttcgag ttagttcatg acaaaatacc tgcgacgctg atagcagact ctgctgcagc 180  
 tgcacttatg aataatggac aagttcaagc tgtaattgtg ggtgctgac gtatagctgc 240  
 aaatggtgac actgccaaaca agattggcac atacaacctc tcaatttctg caaagcatca 300  
 cggcgtgcag ttttacgtgg ccgcaccagt aacttcgatt gatctctccc ttccgtctgg 360  
 gaagcaaatc gtcatagaag aaagatcttc aaaggaattg ttgaactctg aaggtggtct 420  
 angaaagcag gttgccgcgt caggtataca 450

<210> 6174  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-C10  
  
 <400> 6174

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 ggtttgtgat aagcatcttc ccaaacctgc cccaaatggg acaaaaaatt taccacggca 180  
 tgatgatgcg gctccattat agcatgccaa gttacatgaa tttcagacga gtgtcggatt 240  
 tactagattt tataaactag gcatctcaat gtttgtggca ggggtgttga cattaattcc 300  
 catttcttgc atgggaccta agcatgcacc caaggacaaa agatttgatt tttcaaccaa 360  
 tttatatgca ccggagcatg tgcatgtagt tccaatttgc attatgcaca taaatgcatt 420  
 gaaaactcac ttaatgcata aaa 443

<210> 6175  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-C11

<400> 6175

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 aagtggctga agcccgggtgg gcatattttc atcaggaat cgtgcttcca ccagtctggg 120  
 gattccaaga ggaaagtga cccgacgcac taccgggagc cgagggttcta caccaaggtg 180  
 ttttaaggaat gccactccta tgaccaagag gggaattcct ttgagctttc tctggtaact 240  
 tccaagtgca ttggagctta tgtgaaaagc aagaagaacc agaaccagat atgttggtcg 300  
 tgggagaagg tcaagtgcac agaagacaaa ggctttcaga gattcctgga caatgtgcag 360  
 tacaaatcca ctggaatctt gcgttatgag cgcgtgtttg gggagggtta tgttagcacc 420  
 ggtggattcg 430

<210> 6176  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-C12

<400> 6176

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 ctctgttcca gctgtggctt cgccgcagga cctctctagt gcttccgcgg ccttgggtctt 180  
 tgctgcctgg ttatatgtcc accctaaact cctcctaccg gtcatggtgg aatgacttga 240  
 caggaaagac cggttttgtg ggtgatgagg agaggaactg tgaagtaatt ttcgagtggg 300  
 tagtttttat agcccagtgc taagtgtgaa cgcatattag tttgataggt gtgaacagat 360  
 ttgcaattac ttattacgtt gtaatctgca atgtgacgag aaacaaggtc aaaattattg 420  
 at 422

<210> 6177

<211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-D11  
  
 <400> 6177

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tgaccgggtg gtgtggggac gtgcgggtgc acaatgttgt tctgacgagg cggatccacc  180
aaacgtggtt gaactgggtg ccctgctcca ggtgcctccg cccggtttac caccggcgga  240
ttactgggtc ctgctcctgg ggtgttaaag agatttctag cgtcataaac cggcggcagg  300
tgagatcggg gcctcctctt caggacttct ttcgacgcac tctgatccag cataatccgg  360
taagcttggt catccaaagc ggcccgtctc gcgactat                               398
  
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<210> 6178  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-D12  
  
 <400> 6178

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agggggcacc gcacacgact aagaaaacga tcatgtggat caacttgtgt gtctaggggt  180
gccccctgcc tccgtatata aaggagccaa ggggggggtgc ggccggccct ggtaggaggc  240
gcgcaggagg agtcctactc ctaccgggag taggactcct actcctaccg ggagtaggac  300
tcccctccct ttccttgtcc aagtaggaga gggggaagga agggagagag gaggggaagg  360
aaaggggggc gccccccacc cccggctggc                               390
  
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<210> 6179  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-051-Q1-E1-D2

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<400> 6179  
gtaccgcagc tacagctacg acgagtacta caagaagttc tggagcagga acctggacca 60  
ggaccattgc ctggagctct tcacgggtca gaagtgatcc gtgtgcacaa gcttgccctca 120  
tctacggctg ggtgcagtgg acatccacga cgtagcatta ctcaaataat aaatgccctc 180  
aatgtgcggg gttactcgag ttgtttgaac ttgtttttgc ttgagcacia cgtattttatt 240  
gatgtccatc ttgtattgta atccctatat actagtgggt gtgcgcgcgc gcttggtttta 300  
attgtgatcc tactcgtaat gaattatggt actacaacat agnnnnanatt anagaaaaaa 360  
aagcggccgc tctagag 377

<210> 6180  
<211> 454  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-051-Q1-E1-D7

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gttcgtcacc aacagggtccc aggaaggggc gcagttctgc cggggcttcg gcggcatcgg 180  
cgggacccctc cgctaccggg cggacgtcgc cgcctatgac gacgacgacg acgacatgct 240  
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ccgggaggag cctgtgctgg ccacgaccgc gccgggacga gaccctgaaa catccaaacg 360  
atcgggtgcan gggaaacaag gaggtggaga gaagaggatc taagcaattg cgcaatccag 420  
atgttgagcc aggcattgatg atagcgtcga tgct 454

<210> 6181  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-051-Q1-E1-D9  
  
<400> 6181

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gttcaagctt ctgcaaaaaa caagtaatga caaatcttag ggcattgtaca tttcaactaa 180  
aggcaaattt gcaaaatatt tagattactc attattacct tacccttcac gcgcattcatg 240  
tatgccccgt gttgcacgtc gtaaacaatca tccaaaagcc aaaccatcct tacaatttca 300  
tacaataaac atataaaagt tcatcttcat ctcaaatac ggtatacact aaacatataa 360  
catgtgttca actacaagaa tctcaacatc tccttctcac ataatagaata tgtcatatg 419

<210> 6182  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-E10  
<400> 6182

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acctccaggt ccgtgccggc ggcattcttc gtgtctgcta catcgctgc tgatgccctt 180  
cctcccgacg atcttctcac tgctggagat gctaagggtg agccaggggc taccctgtta 240  
atggatcaag ataatacgc aatgaacatt aaaaatgatg ccattttgtt tgacatagac 300  
gaaccttatg caaagaactt tcccacatgg agagtggaga tcattgtctc atgtaaggaa 360  
tctcccaatg tttttctgcc actaagggtg aaggatgtta atcatgatga taaggcagac 420  
attgggagag atctcaaga 439

<210> 6183  
<211> 440  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-E12  
<400> 6183

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aggtcatcat catgaaccac cctggtcaga ttggcaacgg ctacgccccca gtgctggact 180  
 gccacacctc gcacattgct gtcaagtttg ctgagctggg gaccaagatt gacaggcgat 240  
 ctggtaagga gatagaggcc gcgcccaggt tcctcaagaa tggatgatgct ggcatagtga 300  
 agatgattcc caccaagccc atggttgtgg agacctttgc cacttatcct cctcttggtc 360  
 gttttgctgt ccgtgacatg aggcagactg tggctgttgg tgtcatcaag ggcgtcgaga 420  
 agaaggaccc aacöggggcc 440

<210> 6184  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-E2  
 <400> 6184

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 tatttatggc atttccatag ccattccgag atatattgcc atgcaacttt ccaccgtttt 120  
 gttcattatc attatgacac gcattacttt tgtcatattc ccattgcatg atcatgtact 180  
 tgacatcgta tttgtggcaa agccaccatg cattatTTTT catacatgtc actcttgatt 240  
 cgttgcacca tcccgggtaca ccgccggagg cattcatata gagtcatatc ttgttctagt 300  
 ttcgagttgt aattcataag ttgtaatcaa tagaagtgtg atgatcatca ttattagagc 360  
 attgcctaaa gaaaaaata gaaataacaa gaatggccaa aagaaaaata ggcccaaaaa 420  
 aaga 424

<210> 6185  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-F5  
 <400> 6185

ggtaccggac tagaattccc gggccgacgg gtctcacgag ttcttgttga gtttgggtgtg 60  
 gatgaagctt ttgataaaaa gagaaaccgt gacatgaaag gaattaagga gacacaaagg 120  
 ttcaagcttg gggatgcccc aggcaccccc aaataatatt tcaagaagtt tcaatcatct 180

aagcttgggg atgccccgtt aggcattccca cttttcttct tcaacaacta tcggttagta 240  
tcggttgagc ctaagttttt gtttcttcac atgagttgtg ctatccttgc attgttattt 300  
tattttgctt tgcttgatgt ttgaataaga taccaagatc tgaaattctt taatgagata 360  
gagtctttgc atagttgcat aattatttag ctaccctttg atcttcactt atatctttcg 420  
gagtagtttg taatttgctc tagtacttca c 451

<210> 6186  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-F7  
<400> 6186

ggtaccggac tagaattcgc gggccgacgg gcggtgcaga cgtgcccgga gaagaagatg 60  
atccagcagg tgggtgttcgc cagctacggg aaccgcgtgg ggatctgcgg caactacacg 120  
tttggaact gccacacgcc caaggccaag gagattgtgg agaaggcgtg cgtggggaag 180  
aggagctgcg tgctggccgt gtcgcacgag gtgtacggcg gggacctcaa ctgcccgggc 240  
accacggcca cgctggccgt gcaggcaaag tgctccaaga ggcagaggac cgccgagcaa 300  
taagtaacct aagctcacat atgtactgct atgtagatga tctcatcacc ttgacctttt 360  
tgcttttttc atgcttgttg tttgggatac atgttgtact caggttggtg attcctgtga 420  
attgttctag gag 433

<210> 6187  
<211> 364  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-F9  
<400> 6187

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ttcatccctc attccttcac tcagcagctc ctcccagaag tcgtcagtca gttcggcctc 120  
accgcagcct tgatcccgct gacttctgtt tcagtctttg aaggctcctg atattgttaa 180  
gcttgtttac ttatgggcac ttgtgtattg gtttattgct gggcattatg ccttgatatt 240



aaagatttcc gccagttaca aaaaaaaaaa aagagacaat acgaatccga ctaaaaagga 300  
aaagaaccat aaagaaaaaa aacaaaaaaa aaaaaaaagc ggccgctcta aaggatccaa 360  
gctt 364

<210> 6188  
<211> 410  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-G11  
<400> 6188

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agatcaagga caagatcagc ggcgacggcc acggcgacgg caagaaggac ggcgaccacc 120  
acaacaccat catcgcatcc cattagcatt ctaccatttt cctcggagag aagtagccag 180  
aaacagcagc gccatggccg gcatcatgca caagatcgag gagaagctcc acatgggtgg 240  
cggcagcgac gagcacaaga aggacgagga gcacaagaag gccgaggagc acaagaagaa 300  
ggacggggag cacaagaagg acggcgagca caaggagggc atgatggaga agatcaagga 360  
caagatcagc ggcgacggcc acggcgacgg caagaaggac gggcgacaca 410

<210> 6189  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-G3  
<400> 6189

accggtcaag cattcccggg tcgacggggg cggataccaa aaccatcgca ctatataaga 60  
tgcaataata aaagtaagaa aataatacaa gtatctatgt aaacatacaa gtaagaatat 120  
ttttcctttc agaaagaaga taagaacaag aggctcacca cgggtggtgcc ggcgatgagc 180  
tcggcgcggg tgatcgacgg cagtgaagac ggggacgggg cgtgacaaac cgctaaacct 240  
agacaaatat tgaggaaaat ggagcttggg ggtcgagctt ggagaggaga aaggttaagt 300  
agtgtggctc gggcattcca tcgaacacct tgtgtgcata ggaggtgagc tagagcacca 360  
ccaagccctc tccccctggg ccagaaaaaa cagagtagtg tgctctgctc ttacgcgagg 420

gggtatatat aggcacctca tt 442

<210> 6190  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-051-Q1-E1-G5  
  
<400> 6190

ggtagcggac tagaattcgc gggccgacgg ggcgaggcgc ctggaaagat ggcctcggtg 60  
tgaatctggg tggcagggcg gtgtggggta cccacacgcg gcgcttctga ggaccagcac 120  
cggatgagga acccgtgtca cgtccatgct tgcgtgttgc gtcatagtca gtctgaccag 180  
tttcagcact gatggctttg ttgacaagtt tcgaaaaaga tgtgcactca tgcagacgga 240  
ggtcgcggcg aagctcagga ctaaggccct tacggaacct tgcttgcttc ttggcgtcag 300  
tagaaacttc ctcagttgca ttcggggcga gattaccaa ctccttgcta taggcatcca 360  
cagaaagtcg gccttgggtg aaactgcaa attcttcacg tttacgggtcc atgagaccct 420  
ccggaatgtg atgttcacgg aaagcctcgc tg 452

<210> 6191  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-051-Q1-E1-G9  
  
<400> 6191

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taaccgttcg tactaatgaa tacagcaaga attacaagac atggaaagat aagacaacga 120  
aaacattggt acaaagcaaa catatagttt caaatcaatt aactattgaa gctaattgtgc 180  
ccaaaagaat ctaggagtat aactacctac ttcaaaggca tatttataca gttcttctac 240  
attttatact atcccgtagc aatgcattggg ttgacgacta gtgagagtaa ctcttcaact 300  
catacattgt ttaattcccc ttcattgctta tcgaaggatg aatggtagta tgattgttat 360  
gatcctgttg attcttttga aatattcgtt tttgatgatg cttgttatgc ttgtggccaa 420  
gatgccaata tgaa 434

<210> 6192  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-H10  
  
 <400> 6192

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gaattcccg cgcacggggt tcggaggctg ataagctcaa gccccctgtg gagccatgat   60
ttttgcagtt gagagatgga tccttcctgt gtatgtatcg ctttgctaaa gcctgggtgg   120
tgctcacaaa cacttggcac ttgtgtgatt cttttgtcca tggatgtact gtgtacaaca   180
agttgatggg aatgtgattt ggtatatgct ttcagttgaa aaaaaaaaaa aaaaaaaaaa   240
aaaaaaaaaa aaaaaaaaaa acaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaataaaa aaaaaaaaaa   360
aaaagggggc cccccaaaag gttaacctt ttttttc                               397
  
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<210> 6193  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-H11  
  
 <400> 6193

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aggtacaggt caggaattcc cgggccgacg ggcagtgtag tcaccttggt tggactgggg   60
ccttcgtcct cacttcatta aaccacgtcg aggaattcgg cgtcactctg ccggccttta   120
ttgctatgct atgtcaccac tccggagtgc cgagctcttc gatctgccac ctcgggaccg   180
gcttgggggc tgggacctca tcccgatgta agctcggact gcgtcatcaa tgccaaacac   240
aagaaccagc taagtcgtc ttatgtcaa agttttaaaa atttaaattt tgttcgggttc   300
gaccaagcat tatacttttt tggcaaagag ttgtttgtga aaaacttctt tgtcaaaact   360
ttgtttgtga cacacaaatt caaatacccc gtttacttgg gggcttcctt tatgaagcct   420
tccatcttgc atatgatta                                                    439
  
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<210> 6194  
 <211> 452  
 <212> DNA

<213>      Triticum aestivum  
 <223>      unsure at all n locations  
 <223>      Clone ID: LIB104-051-Q1-E1-H5

<400>      6194

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 agactgacac tgcgattgac tttggcaacc tcttgccccg agcgccctcg aagcaccgga    120  
 gcaggagcgc tcatccccgt gaaggaggag ggcacgacga cgaagagagg atgatggata    180  
 agcttctgag aactacagc aagaagggga tggagaggga ggaggagcac aagacgaggt    240  
 cgaagtccag gacccctcg cctcgagcag atcgacctgc tgatggcaac aacagagatg    300  
 gagcgcccag tcatccagag agaaccgcat ctctgcctac agaatcaggt tcaccgggtg    360  
 ggaggacgaa ggctcctgcc cctgttcggg ccacctcgct gcagcaggac acgttcaggg    420  
 ggaacgtgcn accgaagatg ccggattttg ac                                        452

<210>      6195  
 <211>      425  
 <212>      DNA  
 <213>      Triticum aestivum

<223>      unsure at all n locations  
 <223>      Clone ID: LIB104-052-Q1-E1-A1

<400>      6195

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 cgaggactcc acaaagtact atccccgctt taacctggaa gataactcaa gtttttaggga    120  
 cttggatgaa catagcaaaa atgtccttag aagattatac catgactatt atttcgttcg    180  
 ccaagaaaat ctttggcgac aaaatgcact gaagactcta cctgttctat tgaactgttc    240  
 ggatatgttg gcatgcgggg aagatcttgg ccttatccct gcttgtgttc accctgttat    300  
 gctanaactc gggttgattg gattgcgtat ccagagaatg cctagtgaac caggcttgga    360  
 atttgatatt ccgtccaagt acagctatat gacggtttgt gtcctctcat gtcatgattg    420  
 ctcca    425

<210>      6196  
 <211>      432  
 <212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-052-Q1-E1-B11

<400>      6196

ggtcaggaat tcccgggccg acgggactaa gagtttactc cactggaaac ttcactatTTT    60  
ttaggggatc ggtagaaat gcccttagtc tacctttctt tacaatatac tacatctctt    120  
tctgaaggac tctaaagata aagcttggtc cacattgagg aggacacaga catttcgTTg    180  
ttagacatca ctagtagaaa aggggggtatt ggtccaggcc gggtcagccc attagtcccc    240  
gttcaatcca gaaccgggac caatgggggc attggaccgc gttcgtgagc cccggggggc    300  
ggccggggcca cgtggggccat tggTcccggT tcgtctggac cttttggTcc cggctggTgg    360  
gatgaaccgg taccaatgtg gcttgcTcct gggccaccac cattggTccc ggttggTgcc    420  
acgaaacggg aa    432

<210>      6197

<211>      430

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-052-Q1-E1-B9

<400>      6197

ttcccgggcc gacgggCGgg aaagggtga acgcgacggg cgagtttttc cggcgccgtg    60  
acgagtggag gaggcacccc atggtgggga accagctgcg ccacgccact cgggggctag    120  
gcatcgccat cgTgccttt ggtatctacc ttgtcgcgga ggccgcctac aaccgcctct    180  
accgccgcgc cggcgacaac caccactaga tctccccag aggtgaagta gatggagcaa    240  
accaatgttg atcttttccg gtttgatctc ataaggTctg catgaccacc ttgtaatTcg    300  
cgatcaggag atgtgctgtt ggtccaacta gtgttctctg aacgcgtgtc ctttaaattct    360  
gatactccct ccgtccgcaa atacttgTcg gacaaatgga tgtatctaga cataatttag    420  
ttctagatac    430

<210>      6198

<211>      422

<212>      DNA

<213>      Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C10

<400> 6198

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ctttgctagg gagaagaaga ctagggcaaa gaagactgag ggcgagctat ttgagtcgga 120  
gaaggaggca accaagaatt tgcccgactt caagaaggat gatcagaagg ccattgatgc 180  
cgagttgatg aaggctatcg atgctgtccc agaccttaaa aattatcttg gtgcccgggt 240  
ctccctcagg gatggtgaca agccgcatga gatgaccttc taagttacct ggtacaagtt 300  
tcaagatctg tggaagtctt ttttgtctag tgtgtgtgct ggttctgtac ttctgatttc 360  
ttttgcccgg ttggtgaatc tttgatttcc actgaagtct gcctgtcaaa tattttgaga 420  
ag 422

<210> 6199

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C12

<400> 6199

ggctctagaat tcccggggccg acggggggga aagaatgatg gactctatat gatggaagtt 60  
gatagggttc taagacctgg cggatactgg gtgctgtcag gtcctccaat taactggaag 120  
gcgaactaca agggttggca acgtacaaag gaggatcttg aagcagagca gaacaagata 180  
gaggaaatgg ctgagcttct atgttgggag aaagtctcgg agaagggtga gacggcaata 240  
tggaggaaaa gagtaaatac tgagtctgtt ccatctaggc tagaagaatc cactgtgcag 300  
atgtgtgaat caacaaatgc agatgatgtc tggtaacaaga agatgaaggc atgtgttaca 360  
cctcttctctg atgtacaaaa tccaagtga gttgccgggg gagcaatc 408

<210> 6200

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C6

<400> 6200

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 ttttttatta aaaagccaaa ttactccggc ttgtgatatt gtttatgcag agcaattact 120  
 tactgcaaga gcggtggcga ctgacctgcyg tccgtactga ctctaataac aacagtcgtc 180  
 tttacctgcc gcctccggcg tttggtgtat atcaacacat tggagctgca ctgtctgcat 240  
 gagctgttta ttgagtgcga gaaagtcact cctcgggtag cccgggtttt tcttccaaca 300  
 atttgaaggc taattactat atattatcaa ccacctctg cactagatgg ctcaatgagc 360  
 aggtgcacaa gtgcgcgcca ctatagtttg gttaacttca aaata 405

<210> 6201  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-C8  
 <400> 6201

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 acatccccgg cagcgacaag cacaggacgg ttattgccat ggacgggtggg ctctacgagc 120  
 actacacaat cttcagcgaa accctggaga acaccctgcyg cgagatgcta ggggaggaag 180  
 taccctctc cgttgtcatc aagctcgga acgacgggtc aggtatcggg gccgtctcc 240  
 tcgctgcagc tcattctcag tacctcgagg ccgaggtctg aggagccata gcctggatat 300  
 agatatatgt tgggttggtc ctcaggagca gcgatgtctg agtcacgcca gggctctgtc 360  
 tgtgtgtgta gctggagcat ccattggagag ctgtgtctct tagtaattgg tagctctg 418

<210> 6202  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-D5  
 <400> 6202

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 cttttttcag atgattaata gataaattac tcacgtccag caatttattt tagaattttt 120  
 ggggttccag atcttgcgct agctacagat tactacagac tgttctgttt ttgacagatt 180

ctgtttctcg tgtgttgttt gcttattttg atgaatctat ggctagttaa atagtttata 240  
atccatagag aagttggaat acagtaggtt taacaccaat ataaataaag aatgagttca 300  
ttacagtacc ttgaagtggc cttttgggtt ctttcgctaa cggagctcac gagttttcta 360  
ttttgagttt tgtgttgtga agttttcaag ttttgggtga attcttttga tggatcatgg 420  
aacaaggagt ggcaagagcc taagcttggg gatgcc 456

<210> 6203  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-D6  
  
<400> 6203

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agccaaccac tggatgtggc tttcagggtt ttttgcagtg ggattttagt ggtactatgc 120  
tgcgctgtgt ttgggatttg aaataaaacg atgggagatg tgccacgctc ttaaattgcca 180  
atcttctgct ccaaacttgc taaattactt gttgcatttt gcagcttgct tacctttaca 240  
gtgactacct tcttttggct gtgcccattt gggaaaacag tttgtccaat tcacatctac 300  
ttcgtgtcct tttagacatt tcaaataagc aacaacatac ggatgtatgt atacatattt 360  
tatagtgtag atccactcat tttgtccctt aagttgtcac ttgttg 406

<210> 6204  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-D8  
  
<400> 6204

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caggaaagaa aatcaaatta ccttatgaat ctatcgctgc agctccctat gaaccaagtg 120  
ccaaagatgg cactatttag atctatcttc gcttttatgc ctagctaggg gcgttaaacg 180  
atagcgctag ttgggaggca acccaatttt ctttatgttc tttgtttttg ttctgtttg 240  
gtaataaatt ttgtttctac tttctgttta gatgtgtttt cttcttttaa ttagtgtttg 300



tgccaagtag aacctatagg ataacctatg atatgagttg atttgattct gcggaaaaac 360  
 agaaactttg cactcacgaa aaaaattcaa taaatcacag gaacgtgctt ttgcattgat 420  
 tccttttgcg gctgatcaat aaaca 445

<210> 6205  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-D9  
 <400> 6205

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 caagtacaac ctgccatgtg catttgcatt ccaaaagcaa attacttata tgcacatctt 120  
 caggggggagc ccttgccact tatgaagaca ataccctatc ctttacaatt tcacatactt 180  
 cattcccggt gaaaacttca accagtttgt catcaatcac caaaaagggg gagattgtaa 240  
 gtgcatctag tgccaccct agttggttt ggagtattga cgacaaagtt ggttgaggga 300  
 ctaatgcgtt tgtgagaatt gcaggataac tcaggtagtg tccctcattg attcggttta 360  
 cctaccggag atgacccta aaaatgtatg aagacattga cgac 404

<210> 6206  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-E7  
 <400> 6206

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 aaggcacccc aagatattca agaataagcca aaagcctaag cttggggatg ccccgaaaag 120  
 gcateccctc tttcatcttc gttcattggt aactttactt ggagctatat ttttattcac 180  
 cacatgatat gtgttttgcg tggatcgctg tgtattatat tggcttttgc ttgttagttt 240  
 accacaatca tccttgcgtg aacacacctt ttgggagaag cctatttgcg taggatttga 300  
 tagaatactc tgtgtgcttc acttatacct tttgagcttg atagtttttg ctctagtgcg 360  
 tcacttatat cttttagagc atgggtggtg attaatattg aagaaattgc tagtctctca 420

tgcttcactt atattattt

439

<210> 6207

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-E8

<400> 6207

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caatggcagg ccacgcacaa ccggtcgtag ctgagcgagg aggagaggct gcgtcgcttc 120

cgggtgtacc ggcacaacgt ggagtacatc gacgccacca accggcgagg cgacctcacc 180

tacgagctcg gcgagaatga gttcgccgac ctacccagg aggagttcct agccaggtag 240

gcgtcgctct acgatggggg cggtgatgat actggcatca cgttgctgtt gggcggtggc 300

gacgccgagc tgtgggtcgt cgggcgaggac aatgatagct ccttgagggc tccgctccc 360

agctgggact ggagatccaa gggcgccgtc acaccggtca agtcccaagg cgcaggatgc 420

gctagctgct gggcggtcgt ga 442

<210> 6208

<211> 446

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-052-Q1-E1-F5

<400> 6208

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tctgaaaca ttgagaatct cgttttttaa atcccagtaa atcaaaaact caacaaaaaa 120

acatgaaacc tggcatggtt tcatgacatg gcacatatat gccgtggtaa aaaaaatcgt 180

ccagtttgag aagagggcga cacattagta gccacaaaag tcctttttga aacaaaaatc 240

tgacatgtta atatcgcaaa tggttgtatt atattaacca tgatcgaaatt taaccatact 300

tgggtggtgt cgtgcagctg tttgattaga cgggacgagc ccgagaagtc caccgtgcag 360

gtcgcaggg acgcgtgcga agagtctgcc gtgcaggctc gacangacgc gtgcacacct 420

tccgcctcgc aggctcgagc ggacac 446

<210> 6209  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-052-Q1-E1-F8  
  
 <400> 6209

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 cagaaggctg atttaagtga actcatgctc tttgctgcta cccctgaaga agagttgcgg 120  
 cggcgagggtg gtaatgggta tcatgagtac tctactgatg aagaggatga tgctgttctg 180  
 gctcatgtgc gtgatgaaga cgatgatgat gactttctga gtgattcttc tgtgagcgat 240  
 gaggagaatg ctcaaaccga gggagcggat gttcacaagg ttgctgctat tgtggccagc 300  
 tgaaggcatt tgggtccatc ctatctgtct tcatctaact agtagtatat gtttacttac 360  
 tggcagatgt ctctttgctg gatccgtctg tgttaaatgt acccctgttg tgtcntgttt 420  
 cgaacaccga ctatataatt 440

<210> 6210  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-G11  
  
 <400> 6210

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 atcgaggcct cattccgtat tgaccgcctc gacttcgccg ctgcgaagga ggcggatata 120  
 ggctacaact gcagcaccag cgggtggcacg actggacggg gcaacgcttg tcccttcggc 180  
 ctccctgtgc tcgctgatgc caggcgccac ggtgggtgata tggagcggac cggcgtctac 240  
 ttctacgtcg cgagaggcct cgacggcggc ctgcgcacac acttctgtca tgacgagaca 300  
 cgctcatctc atgccaacga tattgtcaag agggtcgtag gcaatattgt ccccggtctc 360  
 aatggcgagg agttttcgct gaggggtgct 389

<210> 6211

<211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-G4  
 <400> 6211

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 gttggaatg aaacagtgat gagggatcca ctggatcaag cgcattgagc cattgactca 180  
 ttgtggagtc atgagtctcc acgaggagtc caccctttct gtcccttttc caatattttc 240  
 cgtatatctt ccgttcaaca tcaatcttac gttgctgaac attgctcttg tatgtaacaa 300  
 accaaaagta aataataaca atatgacca agaattccag aaagcgccac ttacgcacga 360  
 gacaatgcca gctgtactag ttgtgtgaca cacatgttac atttggggat ggggattggg 420  
 attgagcatc gcaagatcga acc 443

<210> 6212  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-G9  
 <400> 6212

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 atccttcgat tttgtgatgg cagggtgca tgcctctggc tttgtcgcgt attgtgcat 120  
 atttcgatag tgtatctagt gtctgtgtt cagtaaacca acgctcgtct cgtctttgtt 180  
 gagtctagca tctgtgttgc ttctgttcat aatcgtaagc gaggtccag tgtcgtgtgc 240  
 aactgcaa atgtttgtcc tattttctac tgctgctgct attggtccag atgaactttg 300  
 tctc 304

<210> 6213  
 <211> 346  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-H7

<400> 6213

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aaactacact acgcgtaaac agttacaaga acctacatac atgttcgttc cccacgctga 120  
tggtgctctt gtgtattgct gctgctgccc atcttttttc tcatcccaca gaggcacaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacccaaaaa 240  
aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgccctaaag gttccaagct tacttacgct 300  
tgaatgcaac gtcatagctc ttcaaaagtg tcacccaaat tcaatt 346

<210> 6214

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-H9

<400> 6214

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aatcgggtcc aatgatattg taaaactgaa tttagagtct gcaattgtta cttggggggtt 120  
tggtagacgg tcgttgtgtt tggggacgat gcagctgcag ccggttctct tggtgtggta 180  
gatttgtggc atggcagggtg ctgctaagct ggagcctgct tgaactgttt tcctgtcact 240  
ttgttggggt aataatgacc atcctgtaaa aaaaaaaga aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggca aaaaaaaca aaaaaaaaaa 360  
caaaaaaaag cgcccgccct aaaggttcca acctactta cccgtgcatg cgaggacaaa 420  
acccttccc aaggggcccc ccaaaa 446

<210> 6215

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A8

<400> 6215

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atgattgtta tgctgcytga cagctgttt ctgaagatca ggccgcatca gcaaccaagg 180  
 aggtggctta aaaagctctg gcctgaaggc cttcttgac tggtacacgg gcgagggcat 240  
 ggacgagatg gagttcaccg aggccgagag caacatgaac gacctggtgg ctgagtacca 300  
 gcagtaccag gatgcgacgg tcgaggagga agaggactat gaggatgagc aggaggatga 360  
 ggaggccgcc taagcgggct tccccctttc tccccaggga tatgccttat atcgctcgtt 420  
 atgt 424

<210> 6216  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B8

<400> 6216

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 ctgaacgaac gacagcgagg acgagcagaa tcgaaagaac cagacgcgat ttctgaacga 180  
 acgatggcga ggacgagcag aaccaataa accaagaacc ccacggacga gcgaaaccaa 240  
 atctgattct tetaatccga cggacgaatc gagcggggat gagcgagata gaaccaggcg 300  
 caggaggagg cgaggcagga accgaggacg agccgaggcg agagggcatg gcccgggcga 360  
 atacaggagg agtggcccg agccccgat gaagagaggg gga 403

<210> 6217  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-C12

<400> 6217

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 atgtggatat tcttctagta ttacaaagcc ccccatgtag atagcttcgt cggcttgctg 120  
 aacactcgaa caccaccta attcctacta ttagaggaaa aatgggtactg cagatactga 180  
 ttaatgaacc gatctcttgg ttggaaagg aaataaagat gttggcctga ccggtctctt 240

ggtcgaaaaa ggacagaaag tggggggtgt tgggtcaaca atccaaccaa gaatgagcac 300  
 gtctagattt cttatgggta cataggaaat ttcgctgacg agaacaaaaa atgcataaat 360  
 ccaaacatgc tttgcatgtc tgccgcactc ggcaacacct ctgcctcacc attt 414

<210> 6218  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-053-Q1-E1-C6  
 <400> 6218

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 caaatattga ggaaaatgga gcttgggggt cgagcttga gaggagaaag cttacctagt 120  
 gtggctcggg catttcacg aacacctcat gtgtatagga ggtgagctag agcaccacaa 180  
 agccctcccc tcgtcgcca gaaaaaatag agcaatgtgg agtcctctgc tggccggcga 240  
 gcgggtatat ataggcatct cattgggtccc ggttcgtggc tggaaccggg actaaaggac 300  
 accctttggg cccggttcaa gccaccagcc gggaccaatg gtggtggggc aggagcgagg 360  
 cacattgggc cgggttcgag cctcgaaccg ggaacaaagg gtacagatga accggg 416

<210> 6219  
 <211> 185  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-053-Q1-E1-D1  
 <400> 6219

gtaagtaact atcagaggtt gagtgtcgtg aaaacgttct gagaaatgtg ggatttgctt 60  
 tgtaatggta agccacatac aagaagtggc tgaaggaaaa aaccggccgc atctacgagg 120  
 atccaaactt acttacacgg taatgtcacg tcataccact accatagtgt aacaaaaaat 180  
 caatt 185

<210> 6220  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D6

<400> 6220

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 ggccagacag cgctggagtt cggaaaggca tcaaatcaga agggagccat gctggattgg 120  
 gtgaagaaga tgcaccatga gaagaaactt gatgtactgg ttgacaaggg tctgcggagc 180  
 agctacgacc ggatcgagct cgaggacatg gtgcagggtg cgctcctttg cacacagtac 240  
 ctcccaggcc accgaccgag gatgtcggag gtggttcgca tgctggaagg cgacgggctt 300  
 gcggaacggt ggcaagcgtc gcaacgagcc gactcacaca agttcacctg gctgagttc 360  
 accttcagcc gctgctactc cgacctgacc gacgactcgt cattgctggg gcatgccgtc 420  
 tagctctccg gg 432

<210> 6221

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D8

<400> 6221

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 cgacatgagt acatttactc aaagattgtg tccttggtag attcgtcagc catgagacga 180  
 ggccttttca taatgccatc ataataattc tcggggtagc ggtgcacctt gccctctggg 240  
 ggtccatcct tcaccagctt ctctgcatct agcttggccc aatgcattta tgcacgggca 300  
 aaggctcggc gggcaccctc aatacaaag gatcgcttga taacttcaag ccacgaatag 360  
 gcatttacca tccgctttat aaggccggag tagctatcgg gcaagggctc accaggccac 420  
 atctggacta tga 433

<210> 6222

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E5



<400> 6222

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caccaacact gttcaattca gctccccagg ttgcgttggt ctcttcccg gggcctgatg 120  
taaaagattt tagcttccaa gatgctgatg ttctcaaacc tgatatactc gctcctggca 180  
atctcatatg gtccgcatgg gcacctaata gaacagatga agcaaactac gctggggaag 240  
gatttgcaat gatgtctgga actagcatgg ctgcaccaca tattgctggc attgcagcac 300  
taataaaaca gaagtatccc aagtggagcc cgtcagcaat aaagtccgcc ttgatgacta 360  
ctgccaatac gatcgacaaa gggagccatc ctc 393

<210> 6223

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E6

<400> 6223

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ccgaggactc cacaaagtac tatccttgct ttaacctgga agatacttca agtttttaggg 120  
acttggatga acatagcaaa aatgtcctta gaagattaca ccatgactat tatttcgttc 180  
gccaagaaaa tctttggcga caaatgcac tgaagactct acctgttcta ttgaactgtt 240  
cggatatgtt ggcatacggg gaagatcttg gccttatccc tgcttggtgt caccctgtta 300  
tgctagaact cgggttgatt ggattgcgta tccagagaat gcctagtga ccaggcttgg 360  
aatttgatat tccgtccaag tacagctata tgacggtttg tgctccctca tgatcatgatt 420  
gctccaca 428

<210> 6224

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E7

<400> 6224

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gggctccaag tcgcaggcca agaccaaggc cagggaagg ctcacgcca aggaggctgc 120  
 gcagaggatg aactaagcct agccctataa gtattgtcag agcatatgcc atgtagtttc 180  
 cctttcagtc tgtcctgatt ttgacgagga actcgaaacc ttttagcagc actgtggaat 240  
 cgtattgtgg ttttctgatt cgctgttccg ttctccagac ttctgcaaag atcagatgag 300  
 gtttaccat gtttgattc tatatagttt tatgtccttt gtcgagtctg aagttagttg 360  
 tgtttgacat cttccaaact tggctggctt ttgggtaaca tgcaatgacg aacagctc 418

<210> 6225  
 <211> 419  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-053-Q1-E1-E8  
 <400> 6225

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 gaagtatctg atgtaaggga ggtgaccaca gaagctgaag aaaacagctt ggatattcct 120  
 gttgatagcc agccagttgc tgacgatact ttccaaggct agactggact tttgccattc 180  
 ttgtacacca tgactttttg tactaaagtt tttcatctcg gttcacagcg aacattctta 240  
 taatcttatt cagttttcgc attgaccag agttccgtca cagcttttgt tgctcatctg 300  
 taaacctgag tgaaacaaaa agaagaattg gatcatcaaa aaaaaaaaaa aataaaaaaa 360  
 aaaaaaact agaaaaaaa taaccgggtc aaagaaaacc tcaaaaagag tttgatgtc 419

<210> 6226  
 <211> 442  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-053-Q1-E1-F5  
 <400> 6226

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 aaacttgcaa gagaatgga caccatgacg atgtacactg aattgaagat cccagaaag 120  
 tggaaatccg cccgcttcca actgatgata aaattcttgc aattgagtat caaattggtg 180

gtagtaagct ccaagaagaa gaggtgcatt gtgctcatca gcctgagaaa agtgtaacat 240  
ccaaccacaa tctataaaat aggcatacaa attcgaagga gcgaaagatg aagatgcaac 300  
aatacttgag agctcaaggt atcctctctg tgattatatt tttttcatca tttcacacat 360  
cgatgttttg cgtcttgaga tgtttattgg attgtgcaag aacaagggtt tcaatatatg 420  
caaaaanaaaa cgacaacagt ac 442

<210> 6227  
<211> 412  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F7

<400> 6227

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gccggtggct gttgctgcgg caatcggtcg ctgttgattt cattcacgca cgctaactcg 120  
ggacatcgat ctatgatcta tctttatctt tgtggaggat ggatgataac tgtttgttgt 180  
ttgacaagggt gacatctaag cagctcggtt gtgtcatttt cttttgcttg tgttgctgta 240  
tatgatatgt atcactgggt cagttgatgc tcctcatggt gaatcatcac agaatacctg 300  
actgcggacg aacggacaca cggtcgctct aaaggatcga cgtttaacta gccgttcattg 360  
ctacttcaga actcttcaaa agtgtcacc aacttcactt cattgaacgt ca 412

<210> 6228  
<211> 292  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F9

<400> 6228

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catcaaattg gcctgagctt tagcgctcac ttcagtgaca tgtttatgga ggaccgcttt 120  
cctacattgt catcctggta aagggatggc aaacatcgtc ttcatagccg tgaagctcaa 180  
tatgaagcac tgctactcta actcgaagta caaggattac tgcactgatg acaacgtcgg 240  
ccaatatgat gatgtcgctc acgcgcctga gtttgacatc tatcgtgaga tg 292

<210> 6229  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G5

<400> 6229

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 tccggtacaa catcaagggtc gattcctctt atttgatcaa ccattcgccg tgtcaaaaat 120  
 gcagagggggg atgcaaggag cacaaggcct gcacatccaa gcaagtggta acatggactt 180  
 gtacatggaa catccaagc gcaatcagag ctgcagttag cctgtacaac gagctagcgt 240  
 aagtcctgc atttcattta attcgtactg gcattcgtgt atgatttgtg tgcagtggct 300  
 gatccacgaa ttttaagttac caggggcgaa catttaactt aaaaaatacg aaggcacttg 360  
 cactctggaa atcaacataa cttgagaaat gtgaagctac atgcactttg gaaactagct 420  
 aatga 425

<210> 6230  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G9

<400> 6230

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 agcgactgag ccagctccgg ccgcgctccg gcagcagcgt gcagtgtagg cgagatcgat 180  
 gaacgcttgg gagaagtgtg gcatacatat atgttgagg gtttggagcg tgtggttagca 240  
 tatgtatgta atgcgtgaca tgtctcatgg atcttgtgat gtataataat tagccggctg 300  
 cactgcactg cacggtgctt gtaataataa cgtaaatgaa tcatgttggt attgatgcat 360  
 ctccgttggt 370

<210> 6231  
 <211> 264  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-054-Q1-E1-A2

<400>       6231

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aacggccgcc cctccgggaa aaaccccccc ctgttggtaa aaacatacgg gaaatccggg   120  
aacaaaaaac attaggaacc ccccgaaata aacatgaaaa attgaaaaaa ttgacagata   180  
ctgggcaaga tgtcaaacac atctggcttc ctctcaaaaa aaaagataaa aaaaaaaaaa   240  
aaaagcggcc gctcaaaagg atcc   264

<210>       6232

<211>       85

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-054-Q1-E1-B2

<400>       6232

tccggaaatt cagggtcgac cgggccagtg gctgaattgt tcaaggattc aagagtcagt   60  
ccagcgtgaa tacctcggac gtcga   85

<210>       6233

<211>       385

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-054-Q1-E1-B4

<400>       6233

agggtcgacc cggctcagat cagaagacc ttaggttgt tctgtacat gcattcgccg   60  
tgtcagcagc caggcgacgc ggaggggatg aagggcagag agagaacatg tttctgtcta   120  
ggtcacactg cttacttagg ggaggtggag ggcccgacag aacgcatgca aatattgaag   180  
agggccgaga ctaatttgtt aacgggttatt ttttaagggtt attgtctgtt tatttctact   240  
tgatttcaac tttctataca tacatacatg caaatgccc aaagtacact tcttacacac   300  
gcctcttcgc tggccacctc tcacaacca catacgcagc tcttttccga tagaaaaaaa   360  
cgggcggctc tagaggattc aagct   385

<210> 6234  
 <211> 480  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-B5

<400> 6234

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 ggcccagagc gccgatttcc cgtcgttcaa gccggcggag atggccaaca tcatgaagga 180  
 cttcgacgag ccgggggaccc tcgccccgac cgggctgcta ctcgcagacg ccaagtacat 240  
 ggtcatccaa ggtgaacctg gcgccgtcat ccgcggcaag aagggcgcgg gaggcacac 300  
 cctgaagaag accgggacag cgctgggtgt cgcatctac gacgagcccg tgaccccggg 360  
 gcagtgaac ctggtggtgg agaggctggg cgactacctg gtagagcagg gcatgtagac 420  
 gacgacgacg accacgccac gccgccgag caccaacaat actaccggcc aaaagacaca 480

<210> 6235  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-C2

<400> 6235

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 gtataatagc ggacacaaca atatagttag gacatatata tagtgcaggc aatatgaacg 180  
 agatggggta gaaattaata aatcacttac agaacgtagc aactgatgat agatttatcg 240  
 agctcgcgca gattgaaaag ctggaacaat tcactcagtt caatttgtac atagtaatgt 300  
 ttgaagtgat gctcatgtct aactccgca taaatatatt ctttggcgtt tttatttttt 360  
 atgtaaccct tgtaccattt cagcagacct ttcatttgtg gaggtagatc cttttcctgc 420  
 gcaggctcga cgagaggccc attcttgaca tatgt 455

<210> 6236

<211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-054-Q1-E1-C4  
  
 <400> 6236  
  
 gggtcgaccg gcagctgaga gtcactgtca tggcgcgtca cctggtggat cgatctgtca 60  
 ggcgggcttc tggagtactc gcagctaaga catcctccag aagctatgct aaacttgaag 120  
 ttttctcttg taagatggaa gtcactgtcg cctggtctct tctcccgtac tggccacatt 180  
 tacgtgacat gccgtgtcct agcatatgaa tgtggctttg gtttggctct aggtgccgga 240  
 agtagttatt tatctatgca tgtatgtatg gttcgttaaca agtgtaagt ggggggactg 300  
 taacttaagc tgggtgggtg gtaataagcc atatccttct atttgtcaga attactatgt 360  
 aatatagaca gttcagattc gatggttggt ccaataaaaa aaaaaagaaa aaaaaaaaaa 420  
 aaaaaagcgg ccg 433

<210> 6237  
 <211> 487  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-054-Q1-E1-C9  
  
 <400> 6237  
  
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 ttgcaatcta ttatgaattg attcaaccag cagggtttttg tcaaatcca gactgataac 120  
 ttttaacaaga gattcttcat caatctacaa aatcatgaga gaaaccaaca ccttatttga 180  
 ggacttaaata gaagaaatac atgactaaaa aatcctgtca gctcccatct ggacagtcac 240  
 acagaaaact gcaagattga ctccaatata cataaaattt taagaaacca gtgagcactc 300  
 ccattgcatag cctcactaaa tggcacaagg cagaagggtg atgtacagac cccagaaaaa 360  
 aactttaaaa tatatcatta taaatcatga agagaaatga tgggcacatt tttaaccaca 420  
 tataaactta accaccaagt ttatatgcct taataggaga tatcaacaat ataaaatatt 480  
 tttatgg 487

<210> 6238

<211> 485  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-054-Q1-E1-D1  
  
 <400> 6238  
  
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 gaaggagggc tgatgatgac gatgatcgaa gattcccctc tccggacccc caaacgggt 120  
 ccacatctgg cctcccgatg aagaacagga ggtggcggtg gcttcgtatc gtgaaacatg 180  
 atcaaacttc ctctttaatt tttctctcca aaagacaggt ttttatagag ttggaattag 240  
 ggtagtgaa gccttggtgg acccactacc caccagggcc tgctagaggg ggatggcgcg 300  
 ccctcatgcc tggcgggcag ccctccggtg ggtcttggtt ccataaatca tcatttatcc 360  
 caacataatt ccccaaaaat ttccttccaa ttccgagAAC ttttatttct gcacaaaaca 420  
 acaccatgat agttctgctg aaaacatcgt cagtccgggt taggttcatt caagtcatgc 480  
 aaact 485

<210> 6239  
 <211> 271  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-054-Q1-E1-D4  
  
 <400> 6239  
  
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 aaaaaggaat aggtacttgg aacggtaagt aaaccgactc aaaaacattt ctaagggcaa 120  
 ttttctccg ttttgaaata tttacaaaaa taggaaaata agaagcagtc cgggaaagac 180  
 acgaagctc cacgaagggt ggaagtgccg cctaccccct gggcgcgccc cctgcctcgt 240  
 gggcaactcg tgtgctcccg ggactccggt t 271

<210> 6240  
 <211> 271  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations



<223> Clone ID: LIB104-054-Q1-E1-D8

<400> 6240

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gggctcaagg tcggcgggaa cccgaacgtg tacgccagcc tccttggggg tctgtgggtcc 120  
tccgtggcaa acaggtggca cctggagatg ccaggcatcg tagatggctc gatttcgac 180  
atgtcaagga ccggccttgg gatcggaatg tttaacactg gcctgttcat angtctacag 240  
gacaagctcg tcgtgtgccg gcctggactg a 271

<210> 6241

<211> 468

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-E3

<400> 6241

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aaagaagaaa gacggccctg cccctgatgt ttggaaggaa aggggctgtg gttagctgat 120  
gtaatgttac accgtagaat catcgttcgt gacgataata atgatccgac cagaactcct 180  
ctagtatcat tgttctgttg tcattgtgta gtttactctg tatctgaact ttgttttact 240  
cagcgaaacc gtactgctat gatgaatgtg tcgatgtaaa tcgtggctgt cgtgcctgtc 300  
tgactgatac attgttcatt tagtcgatga atgatagcac ctgtgtcgtc tcagtttcaa 360  
aacaaaaact caaatcaaac aaaaaaacta ttatcaatag ccgaaaccaa ccacaattaa 420  
attatccaag acacaaaaaa aagcggcccc tcaaaaggat ccaacctt 468

<210> 6242

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F1

<400> 6242

tccggaaatc cagggtcgac cggagcaaag gcgccgacga caagaagctg gcgggggatgg 60  
cggcactcac caccgccacc ctctttcttc aagcatccgg ggacgcgagc ccgggctgtc 120

agaagcagcg ctaccagac ctgaccaagg ccgacgagga atgctttgaa acctgctaca 180  
aggagctgac caatggcggc caaaaactcg acaatttgtg caccagcaaa gagggctcgg 240  
acgacatcgg catggcccag ctccccgaaa tccgcagctt catcaaggag aacaacgggg 300  
cgcacgccc gtggaattgc gataggtgtc gccctgcgaa tgacaagaag acacccgacg 360  
atgtctccaa gaagaacgat gccgaaaagg ccatggctgt cctcgaggtg ctcgtcaaca 420  
aagtgaccaa attatgaaaa acaaacaaaa cctcattgca tact 464

<210> 6243  
<211> 445  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-054-Q1-E1-F11

<400> 6243

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gaggaagaaa atgcgatgct gaagcaacaa ttggaacagt atgagaataa atggtcagaa 120  
tatgagacca agatgaaagt tatggaagag gcatggaaga aacagctctc ttctctgcag 180  
ttgagtcttg tggttgctaa gaagagccta gctgctgatg acatgggtcac ccgagcagct 240  
cggactgata ccaactccaac gcatgctcaa tacgactctg aagatacaat gtccacaggg 300  
accataccc cagaagggac agagttgaaa taccaaaacc acaaccctga acctagactg 360  
gcgacaggaa actcagatag gcggatagat gctgtgaatc acctagcaaa ggagtttgag 420  
gacaggcgac aggtattcga cgacg 445

<210> 6244  
<211> 358  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F2

<400> 6244

gtccggatat cacgggtcga ccggactcca gacactgagc tactatacaa aggctggcag 60  
gaaaacactt gctgacaatt atgactatgt catgcatgga aagctttaca agatttcaga 120  
ggacaattcc agcaaggata aaggacctac taaagtggag atctatgcat cttttggcgg 180

cctcctgatg ttgctcaaag gtgatccttc aagtgtgtgt aacctcgagc tggatcaaaa 240  
gctgttcctc ctcatccgaa aggtgtaaac gtgtcatcta cctgataacc agcgcttgta 300  
gttcactcaa ggctattaca agcctgtgat cgtttggagg ctaatcgtcc tacaccct 358

<210> 6245  
<211> 435  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F3

<400> 6245

ggggagagag agattggtaa ctttgtgcat gagagagaga cagaggggtgg gggaggagtc 60  
agtcagccgt cgtcacatca ccctgcttcc aaatgacccc gcattctcta gcgcagtgtg 120  
gttgccgtca tcgatctgct cgatgccctc tttgacgatt gaggtgttgt gcatgttggg 180  
gtgcaaagaa gcacaagcga gagtggtcac cgtataacct tggatgggga tgaattgtgt 240  
gctcgggtgt gtgtgtgtgt gtgtgtgttg tgctccatgt gtgtgtgtgt gtgtgtgtgc 300  
atgtgtgtgt gtgtgtgtca gatattgaga gaaaaaacct aaggagagaa atgggtattc 360  
acgaagagat tgtgcggggc ttgaggtggg cagggcccgg gtgacggtgt caaaatgtgc 420  
gcgttgatgc atgtg 435

<210> 6246  
<211> 420  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-055-Q1-E1-A1

<400> 6246

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ggacagagag agaggagaga gagggaggga gaggggtaga gtgctggatg ggtgatggag 120  
ttgcttctcg aagagtgggg atgtgtttct gtgtgtgcct gtgcgtgata gagctgtcgg 180  
gacgcatcca tggatgatga aggggaacca tgtgtttggt aagcaaacct aactagatcg 240  
gtagatcaat tgttgtttgt cggaggaagg gagagacata actaatgagg tagatcgatc 300

gacgcgtggg gaaaaacgag ttataaggac ctagctagct atatgtatag cgggagatcg 360  
gtcgggtgtac gtccatttgt tagaggcaaa taaggcccg cgagacggat agacagagag 420

<210> 6247  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-055-Q1-E1-A2  
  
<400> 6247

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gggacacctt tgccctctatc aagtggatc agatttccag gttgctcggg gagattttac 120  
agtttttctg agtttagatc gagtctgttc ttcataccta cagtccacga aaaagccaca 180  
aaaaaaaaatt aggggttagtt catcatatcc gaaccaatct gagcctttgc ataatctttt 240  
tagggttttt gctttgttga atttgcggtt gcatcgctgt gtcaagttgc tggctcttaga 300  
gtctagtctt ttagagtttc gaggctctgt cataagttgt cacgccgccg ccgcaccatc 360  
atcatcgctt tgccatctac caccattgct tatccgcaa cgctttgaat ccgtatccat 420  
ata 423

<210> 6248  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-055-Q1-E1-A6  
  
<400> 6248

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aggaaaggct acaatctcgt ggatgcagtc acgaggtgca cgggtgcagg gtatccgaga 120  
gggtggacgg cgatcttcat cgcgctggac aacgtgggga tgtggaacgt gaggtcggag 180  
gattgggtgc gcaggtacct gggccagcag ttctacctcc ggggtgtacac gccggcgcac 240  
tccgtccgag acgagctcac cgtgccgacc aacgcgatcc tctgcggccg cgctgccaac 300  
aagagccgcc tgccattctc tcagtagtga gcaactgag gccgctggca gggaatgatc 360  
caattgtatc ggagtattag tagtgggtata tgggtgtgcaa gtcgaactgt cgaagactta 420

gtttggctgg tta

433

<210> 6249

<211> 483

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-055-Q1-E1-B10

<400> 6249

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accgctgact aaacctggcg atcactgtgc cgtatgtgct aggggtacttc tttgatgcaa 180

taaacgtgta attgggaaag ctacctgtgt tgccggcaaat cttgaaggaa ctctgctcat 240

agaagattca gaatcgttga tctagaaaaa gttcgtcagc agtctggaaa attcaggttt 300

cagcaccgac tcctgttggg cgcgcgagg agtcgggtag gcgcggcagt aatgcctaaa 360

agcaagggaa actggccggc caactctggc gcgagcatgc tttttactct ttattaatct 420

tttaatcggg ttttctctga ttttttttgc gaatcttgat gtttttaaacc ctttttaaaa 480

atc 483

<210> 6250

<211> 361

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B6

<400> 6250

gtaccgatct agaattgccg ggccgacggg tgaagaaatg ccaagacatc atcttgttgc 60

aaatacccca cccactctc tgcgagattc gctaagttcg ttgtgcatta catactggaa 120

tgcgttagtt acctagttac gatcgacta gaacaacatt tgtgtactga gtattcggac 180

aaagtttgtt tttaaagtgg gcaacttttt tgttaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaca 300

aaaaaaaaaa aaaaaaaaaa aaaaataaaa aaaacaacaa aaaaaaaaac caaaaaaacac 360

a 361

<210> 6251  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B8

<400> 6251

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 aagaagcctg tggccaccga gaaaaagcct gtcgtcgcca acggtgctgt caagaccggt 180  
 gtagctgctt gatcgcatc ctgatcctcc cagctagcca tgaggaacaa acggacgggtg 240  
 ctggcgaacc aggcgagaca tgcagggtcc caagtaccga tcaccaaagg tggctggaaa 300  
 gcgggttgga tagttaggtt tattccctag ctctctttt cccctgtcat cgtcgttaata 360  
 accgtaattc aatttggcta gctctaaaga ctctctata gtggtatcat cggaatcacc 420  
 agaaaaagag aaaagagaac ctgtggcaag acaaagggt 458

<210> 6252  
 <211> 470  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B9

<400> 6252

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 tgcatgggac accaaacaga ggatgtcatt gggttttgtg ttgacttcat tcttggcctt 180  
 aagaagatag gtctccctaa atcgcggtat gatgggagac tgattggaaa aggcacgcta 240  
 ggagcggact caataatatg cagggacggg cattcttgggt ctcaagcaca ctacacagtt 300  
 ctacagaact ctaccttgggt gaccccgat gtcgatgaac acaagaatag tctgcactcc 360  
 aaacacccgg agcagtgtga cgactggatt acatgtgaac acatcaggac tttcagcagt 420  
 tggttggaaa cacgtctcag aggtgacaac actgtttgtg atgagctgta 470

<210> 6253  
 <211> 408  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-055-Q1-E1-C7  
 <400> 6253  
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 tatcaagatt aggaggggtga atgtagagc taatcttgat atttgattta gcatgtttga 120  
 gttttgcatg tagtctagtc tagtgtggtg ttcgtccgac gaaggcttca ggtgagcgcg 180  
 ccaaggaggt gagatgccag gatgccgtgt gaggcgggtga gcacggcgag atgccgatgg 240  
 tgctgcgtga gaagcggcaa gacatatcag aggtggagc cgtgatggac tgcataaat 300  
 tgggtcgggt gaaccggccg gtcgttctgt ttgttgact agctgttcat gcgtgagttc 360  
 gtttagtcct agccgagagt atcgttgcta gtagttgatg catgcatg 408

<210> 6254  
 <211> 490  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-055-Q1-E1-C9  
 <400> 6254  
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 aatctagggg cctgtttgtt cttggcctcc ccatacctct cgttccatgg ggatctgtgg 180  
 ttggattgga taaaagatgt cgtgtgtgtg tgtgtcttca ggtcccttgg gttcccaccc 240  
 caccctcttt ttactggggc gaggccacgc ccggtgctgt tgaaaactca cgcggcggca 300  
 catacccaca gataaagatg caagaattta atcgtggagt tgccattgga caagatggcc 360  
 agcctcctcc taccgtccag tgctctcca tctactctc tttcaacctg tcatgcacta 420  
 gtagcactgc tgcttagacg tagtagctgg atgctgcca gagtggctga aagaaggctg 480  
 ctttcggcac 490

<210> 6255  
 <211> 418

<212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-055-Q1-E1-D1  
  
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 ttcacttata ttattttgag agtcttttag aacagcatgg tattttctat tttcataaag 180  
 ttggtcctag aatgatgagc atccaagttg ggtataataa aaactatcat aggaagtga 240  
 ttggatgcta tgatcaactt gatacttgat aattgttttg agatatggag gtagtgatat 300  
 taaagtcatg ctagttgggt gattatgaat tcaaagaatg cttgtgttga agttagcaag 360  
 tcncttagca tgcacgtatg gttaaagttg tgtaacaaat ttgaagcatg aagtgtac 418

<210> 6256  
 <211> 484  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-055-Q1-E1-D11  
  
 <400> 6256  
  
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 tcgtcttcat catcattgtc tactccgtcg gctgctgcgc cttcaggaac aaccgccgcg 180  
 accaccgcaa cggcggcggg tacaagcagc agggcgcgta cgctgatcg tttggctcgg 240  
 ttatttattg cttggattgg atggatgcga tcgtcgtgtc attttcattc atcgtcgtgc 300  
 ttctcttagg atggcctgat ctagctttgt acaggcgaga ttattctgtg ctctgatcat 360  
 ctactagtta ggttctatac tccgtggtca tgangagggt tgtgtatata tcttttctgt 420  
 tctttgatat gtatggcaga ccattatata tgtaacggat tattctggag ttatttattt 480  
 cata 484

<210> 6257  
 <211> 440



<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-055-Q1-E1-D5  
 <400> 6257

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 tttcactaac ggagcttatg agatttcctg ttgagttttg tgttgtgaag ttttcaagtt 180  
 ttgggtaaag atttgatgga ctatggaaca aggagtggca aaagcctaag cttgggggatg 240  
 cccatggcac cccaagatat tcaataatag ccaaaagcct aagcttggcg atgcccgggg 300  
 aaggcatccc ctctttcgtc tttgttcatt ggtaacttta cttggagcta tatttttatt 360  
 cgccacatga tatgtgtttt gcttggagcg tcttgtatga tattagtctt tgcttttttag 420  
 tttaccacaa tcatccttgc 440

<210> 6258  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-055-Q1-E1-D8  
 <400> 6258

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 ggctcccaa aacaatgttg ggcgccatgc atgcaatgtg gaacaaggaa ggcattcccag 120  
 ggttcttcaa agggttacat gctcagatac taaagacagt tctgagctcc gcattactgc 180  
 tgatgataaa agagaagatt tcaaagttca cttggatctc gctgcttgcc ctgcggcgat 240  
 atctctttgt ttctcggaag agaatcaaga gtgcatagtt gtatcatgca tatgtcagac 300  
 ctgagaaaac cagtctaata gtccactggg atttcaagat cgtattatac caaataacag 360  
 aagtacagaa gcagaacagc acgatcatct tgagagcgcc atggaatgtt ctgaataaat 420  
 ttgtttgttt ttccatgtag tagctctgaa catctg 456

<210> 6259  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-E2

<400> 6259

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caatactgtc catgaggggtc gcattctacca gctgaagctg ttctgtgaca aggactaccc 180  
tgagaaggca ccatctgtta gattccattc aagaatcaac atggcttgtg ttaatcacga 240  
gactggggcg gttgacccaa agaagttcag ttgctagca aactggcagc gggagtacac 300  
tatggaacat gtcttgaccc agctgaagaa agatatggcg gcgacgcaga accgcaagct 360  
agtgcagcct ccagaaggga cattcttcta gcggggtgtt tgctggccca tctcca 416

<210> 6260

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-E5

<400> 6260

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gtctggagtg acgctgccaa ctctctcttt gaagatttga aaagacagct tgctgagcca 180  
cagttttcttg ctgccccctg tgagaaggag ccgctattgt tatatgtggc tgctaactca 240  
cggggccatca gtgtggccat tgttgtggag tgcaaggagg ctggcaagga acatccggtt 300  
caacgaccgg ttactacgt caatgaggtg ctatttgaat ccaagcaaag atatccacat 360  
tggcagaagc ttgtttatgg ggtgttcatt gcaagccgga agcttaagca ttacttccag 420  
ggtcacact 429

<210> 6261

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-E6

<400> 6261

ggtaccgata tagaattccc gggctgacgg gatgtataac attccaaatt gaaaatttgg 60  
 gatgttacag tacatggaat atgctggcaa gatcacacta tagagcaatg atgaataata 120  
 gctatcacta catgcatatt tggccggtgg aggctctaag tttaatgttt gcataaagcc 180  
 gattttccct acaacaaagg aataactttt atttgctacc aagttgaatt acccatattg 240  
 agaaggtttc tccaactcaa tcccaaatta ccaagtataa aataactaacc caacaatttc 300  
 attagacaga atgatgagat taacatataa tccaaatacc agatactcaa gatgtccata 360  
 actggggaca cggctaacca tgattagttt gtacactcta cagaggttgc gcactttttc 420  
 cccacaagac tcga 434

<210> 6262  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-055-Q1-E1-E7  
 <400> 6262

ggtaccgata tacaattccc gggccgacgg gaagcagcaa ccaacttacc aaaagttgat 60  
 tataaagcat gctaattctga aaaaacttag tctatggggc tggtctgcaa tagatgccct 120  
 atatgtaaat tgtccagagc tgagtgatct gaacctcaac tcttgcataa atctgaatcc 180  
 agaacggttg cttcttcagt gtccaagctt gaaagatgtt catgtcactg gatgccgtga 240  
 catgttgatc ggagcaatca gaaaccaggt tctgaatgag tttgcagcag gagagcctcg 300  
 catgccttgc aagcgccttg ctgatggctc gaagcgggtg caagtccttc agttcatgcc 360  
 agaacagcag tttgaggacg agaaatggtg cggcgagtcg cggcgaagcc agtgcgccg 419

<210> 6263  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-055-Q1-E1-F10  
 <400> 6263

cgggtcgacc gggctctgttc aatcatctac agaatttagt cctcatcaga gatcctgagg 60  
 actccacaaa gtactatccc cgttttaacc tggaggatac ttcaagtttt agggacttag 120

atgaacatag cacaaatgtc cttagaagat tataccatga ctattatttc gttcgccaag 180  
 aaaatctttg gcgacaaaat gcactgaaga ctctacctgt tctattggac tggtcggata 240  
 tgttggcatg cggggaagat cttggcctta tccctgcttg tggtcaccct gttatgctag 300  
 aactcgcgtt gattggattg cgtatccaga gaatgcctag tgaaccaggc ttggaatttg 360  
 atattccgtc caagtacagc tatatgacgg tttgtgctcc ctcatgtcat gattgctcga 420  
 cattacgtgc ttggtgggaa ggagatgaag ggacaagatg tcgttt 466

<210> 6264  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-055-Q1-E1-F3  
 <400> 6264

ggtccagnaa tcccgggtcg acactcttcc aaaccactt tcaataatat tgcaaact 60  
 attatcaatc tcatatttat catgggcctt aaataaattt caagttcata agaaaaatca 120  
 cccaatcac gatcatcaca acaaatagta gtcatagcaa aactagcatc cccaagcttg 180  
 aggttttgca tatcattagc acaattgtca ttaagagaat ttatgatagc atcatttcaa 240  
 tcatgctttt catcgaagga actatcaagt acgggtgcaa tagcaacaat ctcatgttta 300  
 acataaggaa ctatagcaaa ttcatattca taaatattgg catcatggcc acaagaatag 360  
 caagaatcat gatcatcaag ggatatttca atcatatctt cggaatcaca attatc 416

<210> 6265  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-055-Q1-E1-F5  
 <400> 6265

ggtaccgatc tagaattccc gggtcgacgg gcaaggatac gccagactga cagaaactga 60  
 ccttacaaca cgctgatatg caaattgcgg ctgcgcgggc acataccggt gcaccaaact 120  
 gagtctaagg aatctgtgca acagggtgtg caacacgtga tgccggcaat gcagctgctt 180

gccccccggc accgcgggca acgaggacat ctgcccctgc tacgctcaca tgaccacgca 240  
cgaaggccgc tatagttgcc cacgatacaa tcgcatctc cacggtcaat cacgactact 300  
acataatcga tcgtcatggc ctctcaatta atatcacatc cacgatgagc gacagctaga 360  
ctagcatgaa gcacgatcga tatgatacat gtactactca agctagtgtc gcaaactatg 420  
taccttgtgc ccaccata 439

<210> 6266  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-055-Q1-E1-F8  
<400> 6266

aggtaccagt ctagaattgc cgggtcgacg gggagcacia ggagaagaag gacaagaaga 60  
agaagaagga caagaagcac ggcgagggcc acaaggacga cgacggccac ggcagcagca 120  
gcagcgacag cgacagcgac tgagccagct cgggccgct gcagtgcagg ggagatgaac 180  
gcgtgggtta atttggagcg tgtggttagca tatgtatgta atgcttgaca tgtctcatgg 240  
atcttgtaat gtaataaccg gctgcactgc atggtgcttg taataataac gttaaggaat 300  
ttccattggt aacaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaacaaaaa acaaaaggaa 360  
aaaaaaciaa aaacaaciaa aaaaaaaagc ggccgccta aaggatccaa gctt 414

<210> 6267  
<211> 273  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-055-Q1-E1-G1  
<400> 6267

cgggtcgacc gggaaagaga ggaaaaaatg tactgtagac aacagtgggg tggtaattc 60  
cttgtaagtt gttaaaaatg aaagaaacia caatggggtg gttgatttct aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaccggccgc ccaaaaggat caaagcttac gtaccgtgc atgcaacgtc 240  
aaaactcttc aaaagtgtca ccaaaattca att 273

<210> 6268  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-055-Q1-E1-G5  
  
 <400> 6268  
  
 aggtaccgat ctagaattcc cgggccgacg gggcggataa ctccgcatgg gatatcgata 60  
 gcagcccaga aaggcgcccc cgagataagc ccctggccaa atcatgagta ttcaaagact 120  
 cgacgcattc atatatcagc ctctttactt cataatttta acatgttgaa tcatgtactt 180  
 gcacttcggc tegtcccgcc ctcgagcgat cctcatcttc ggggaactcg ctggacccaa 240  
 aggtgatgga caatgggtcc cttccgacgg cctcctctcc cagggccatg gatgacacca 300  
 aggtgttgtc ccaaaggatc ccaggctagg gagagacgca tgaggccttc agggcggtga 360  
 cagaaggcga gacctcgacc gcctgacaca tgggggagaa gatcccatgg agaccggcga 420  
 t 421

<210> 6269  
 <211> 180  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-055-Q1-E1-G6  
  
 <400> 6269  
  
 gacgggggtac taaaaaaaaa aaaacaaaaa aaaaaaaaaa ataaaaaaaa acaaaaaaaaa 60  
 aaaaaaatga aaaaaaaaaa aaaacaaaaa aaaaaaaaac cggacgccct aaaggatcca 120  
 accttactta cccttgcatt caacgtcaaa ccccttctaa actgtcacca aaattcaatt 180

<210> 6270  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-055-Q1-E1-G7  
  
 <400> 6270  
  
 ggtaccgatc aagaattccc gggtcgacgg gctattttta aaattagaaa ggaagggcaa 60

gattgaagat gcaaacaaaa ataatgttgg acacttccat tctcagctca ctcaagacat 120  
gaatatcttg catagaaaca tctcaacttc ggtctctcaa caggagagcc aactgaaagt 180  
acttgaagag gagatgcaat cttttatcac ctcgaagggc aagggtgttg gaggacttca 240  
aaatcaagta agagaaatga aagagagctt cagttcaagg attgcagaat tgcattggctt 300  
tgctaattgag ctcaacctca aatcccaatt aagctctgag aagctgaatg cccaagttag 360  
cgcacacaca tctgatctgg aggattgttt gaagggcctc ttagctgatg ctgaccaatt 420  
actcattggg ctacaaaatg ggctccctca gcaag 455

<210> 6271  
<211> 165  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-G9

<400> 6271

accggtcatg tattccgggt cgacgcgggg agcttttaaag atctagaggg gggaaaaaaaa 60  
aaaagcggcc gctcaaaagg aatccggccg cacgtacacg atccatgcta acttacacgt 120  
ctacgagact tcaaaccact tccatatcgt caccatctt caaat 165

<210> 6272  
<211> 437  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-055-Q1-E1-H1

<400> 6272

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gggaagtcgg ccgccaagga gggcggcgac aagaagggca agaagaaggc caagaagagc 120  
gtggagacgt acaagatcta catcttcaag gtgctgaagc aggtgcaccc cgacatcggc 180  
atctcctcca aggccatgtc catcatgaac tcttcatca acgacatctt cgagaagctc 240  
gccggcgagg ccgccaagct ggcgcggtac aacaagaagc caaccatcac gtcccgggag 300  
atccagacct ccgtccgcct cgtcctcccc ggcgagctcg ccaagcacgc cgtctccgag 360  
ggcaccaagg ctgtcaccaa gttcacctcc tcttaggctg ttcgtcttcc tgtgtctcgt 420

anttagctgt tccggtg

437

<210> 6273

<211> 419

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-055-Q1-E1-H3

<400> 6273

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gaaggcgaag tcggagtcgg agtggagata gatatggacy tgacaggtac agagagaggg 120

atcatcatcg tcgtagcagg agtccttagcg ctagtcttga tgattacaag aggcgtggca 180

gagacagaag tcctagtcgt agcaggagcc gcagctacag tcctgatgat gacaggaagg 240

gtggcagaga cagtttgtcg cctgcacgca gaagcactag tcgctccoct cgcaagacac 300

cacctctcg caagacacca cctcctcgcg aggggtctcc tgctaggcgc aatgatgacc 360

ggtctctgt tgggcgcaat gatgaccggt ctctgttag gcgcaacgat gaccggtct 419

<210> 6274

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-H5

<400> 6274

aggtaccgag tcagaattcc cgggtcgacg ggagtcataa aatcctacat aaaacttgta 60

gatcactgaa tatgatattgt ttgattcctt gcaatagttt tgcatataa agatgggtgat 120

attagagtca tgctagtggg tagttgtgga ttgtagaaat acttgtgttg aagtttgtga 180

ttcccgtagc atgcacgtat ggtgaaccgt tatgtaacga agttggagca tgaggtatct 240

attgattgtc ttcccttatga gtggcgggtcg gggacgagcg atgggtctttt cctaccaatc 300

tatcccccta ggggcatgca tagtattact ttgcttcgag ggctaataaa cttttgcaat 360

aagtatatga gttctttatg actaatgtga gtccatggat tatacgcact ctcacccttc 420

catcattgct agcctc 436



<210> 6275  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-055-Q1-E1-H7  
  
 <400> 6275  
  
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 gattttctcca tgggtggacag gattttgttg ggatatcaca atatctctta tattattaat 120  
 gcatctatat acttggtaaa ggggtggatgg ctccggcctta tgccctgggtgt tttgttccac 180  
 tcttgccctcc ctagtctccg tcataccggg gttatgttcc cggattttgc gttccttacg 240  
 cgatcgggtg atttatggga cccccctgac agttcgcttt gaataaaact cctccagcaa 300  
 ggcccaacct tggttttacc atttgctca ccaccaccta cttttccctt gggagtcgct 360  
 ctctcgaggg tcatctttat tttagcccc ccgggccaat gcttgtctaa gtgctggtcc 420  
 aaaccgagcg atg 433

<210> 6276  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-055-Q1-E1-H8  
  
 <400> 6276  
  
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 cgcgtgctga acgtgctccg cgacgacggc gggatcacgg tgaaggggca cgtgcagaag 120  
 ccggtgctca aggagcgggt caagcagttc aacgcggcca tggacgagat ccagcggacg 180  
 cagggcgcggt ggggtggtgag cgacgagcag ctgcagtcgg agctccgggt atccatcgcc 240  
 gccgtcgtgg tgccggcgta ccggtccttc ctccggccgt tcgcgcagca cttcaccgcg 300  
 gggaggcaga cggagaagta catcaagttg agcgcggacg acctcgaggg catcatcgag 360  
 gagctctttg agggcagcgc cgggtcca 388

<210> 6277  
 <211> 174  
 <212> DNA



aatgatcatc ccaagcctac aaatatgcc a gttgtttta agaacaagtt aaaacgtggc 240  
atgagatcaa atacacaagc gtgactttta catcggtgat tacgtctagc tatacaactc 300  
tcatttaaaa ttttttgcac accaccatcg atccaaattg taacgtccct acataagcga 360  
cgatgtctac cgtaccgg 378

<210> 6280  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-056-Q1-E1-E7  
<400> 6280

acggcaaaat gcagtacagg atacagttcc agaggccaaa ccccgtcggc accaacaatg 60  
cgctccacc gccaacacc gcggcgacag cagcgccgac atcgaccccc gcgagctcct 120  
tcctcgccat ggttcaatag gcgctcagca ccatggatca tcagtatact tccagttcca 180  
gacagacaat aacctcgaag catcatcacc atcaccatca ccgagtcacc gttccatgcg 240  
tcacctctc gagtcgatca tcgccatcac atcacaccat caccgacgac gactgttctc 300  
tttcaccttg taattcctct cgtgccattc cattatttat tgattcggtc tgtgtaataa 360  
gagcctctct tctgttccct aaaccggc 388

<210> 6281  
<211> 249  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-056-Q1-E1-G6  
<400> 6281

cggggtaaaa cagataatat cgatataggt tattctacaa gattactcta tagatccatc 60  
agctctaagt aaactgcgta taaatcatgt atgtataagg tatgtgttac tgatgttaga 120  
agcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagcggccg ctccaaagga tccaaactta 180  
cgtatgcctg caaacgaaat cataactcat ccagagagtc acataaaatt aaatcacagg 240  
gccttttta 249

<210> 6282

<211> 374  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-056-Q1-E1-G7

<400> 6282

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 cacggcgacg gcaagaagga cggcgagcac aatgagaaga aggacaagaa gaagaagaag 120  
 gacaagaagc acggcgaggg ccacaaggac gacgacggcc acggcagcag cagcagcgac 180  
 agcgacagcg actgagccag ctccggccgc gctccggcag cagcgtgcag tgtaggcgag 240  
 atcgatgaac gcttggggaga agtgtggcat acatatatgt tgcaggggtt ggagcgtgtg 300  
 gtagcatatg tatgtaatgc gtgacatgtc tcatggatcn tgtgatgtat aataattage 360  
 cggctgcact gcac 374

<210> 6283  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-G8

<400> 6283

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 gatgatgttt ctgagtcaga ggtageccct gactcccttg gccaatctcc aactatctta 120  
 ttgacactga ctattgccag gacgacacgg gggccagcca ggccgtggaa gaagaggtaa 180  
 ctatttcctc cgactcagcc cctttgccga gacaaaaact tcgaatggta acccggaag 240  
 taaggttttc acaccatttg gcttatttgg accctcattt tcttttgaaa agcagcaaca 300  
 tgagagtcac cgtcaggccc ggactaatga tgatgatgat gaaccacctt ccgaattaca 360  
 aaaaactcat caaaaatgcc agaatgaggt ttctttcacc tttgtccttt tgttttatcc 420  
 atgaat 426

<210> 6284  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-H1

<400> 6284

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gtaatatcaa gttcattaag atagtcatca agaccagaat tcttgaactc ggtcccatg 180  
tcacttctga tgtgcttgat cttcacacca aagttggttg aagccctcga ggaaaatcgt 240  
ttgaagactt cctgcacctc atgtttgtaa gtgacaatgt gcacccatgt gtaacgagaa 300  
taatcatcaa caataacaaa gccatataga gacgcacatc ttgtaactgt ggaataatga 360  
ttaggaccaa agagatccat gtgaagcaat tcaaattggc gagtggtagt catgatagtc 420  
tttgctggat g 431

<210> 6285

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-H5

<400> 6285

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acaagtttct taggacttcc taatttggtg gaatTTTTgc ggttccagaa gtatacgttt 120  
gttacagatt actacagact attctatTTT tgacagattc tgttttctat gtgttgtttg 180  
cttatTTTga tgaatctatg agtagtatcg aagggtatga accatagaga agttataata 240  
cagtagatat tacaccaata tgaattttaga atgagttcat tacagtacct aagtggtggt 300  
tttatTTTct tatactaaca aagcttacga gttttttggt gagttttgtg ttgtggagtt 360  
ttcaagtttt gggtaaagat tcgatggact atgggataag gagtggcaag agcctaagct 420  
tggggatgcc ca 432

<210> 6286

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-H7

<400> 6286

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aaagcctatc acttcgtttg gttgttgata ttcaagccta ggtataaata ttggcacggg 120  
ataccccgaa ttccctgtt tagatggaca aggaatcagt ccaccgaatt ggcctcaa 180  
attgggtggc ccgcttcgaa agcccgctc tctattccca aattcggagg gggcgagctc 240  
gattttcggg gatattcggg aaccagcccg cgacttaccg cttcgaccgc tccagaaaag 300  
gaagaggtgc actcgagcgg gagagaaggt gagcacaacg gcggcgcatg tcagacaact 360

<210> 6287

<211> 365

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-H8

<400> 6287

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aaaaaacatc aataggatga taaaaatata aagcctaagt aaaaataata tggaacagaa 120  
taccocgaaa ttccctgaa aaaatggggc ccccaaaaag tttccagcct tggtttccct 180  
tattggaagg ccaaatecct taaaaagggt ccccaaaactt aatttcaggg gcggttat 240  
aaaaattccg tgatgggaaa aacctaggct ttacacaatt taacccctt ggacaaaaac 300  
cccctttcgc caattgggct aaadacaaag gggccccac cgttgcccct tccaaaaatt 360  
ttccc 365

<210> 6288

<211> 457

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-057-Q1-E1-A6

<400> 6288

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tggtcattca catggttagt cataaaatac tacataaact tgtagatcgc tgaatatgat 120

atgtttgatt ccttgcaata gttttgcgat ataaaggtgg tgatattaga gttatgctaa 180  
 tgggtgaatg tggattagta gaaacacttg tgtcgagggt tgtgattccc gtagcatgca 240  
 cgcattggtga actgctttgt gatgaagttg gagcacaatt ttattttattg attgtcttct 300  
 ttatgagtgg cggtcgggga cgagcgatgg tcttttcccta ccaatctatt cccctaggag 360  
 catgcgcgta gtactttgtt ttcaatggct tgtagatttt tgcaataagt atatgagttc 420  
 tttatgacta atgttgagtc catggattat acacact 457

<210> 6289

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B10

<400> 6289

ggaatcccta tagtgagtct tattaagtta tcaaagcaaa gtattacgtg catgctccta 60  
 gggggataga ttggtaggaa aagaccatcg ctcgccccg accgccactc ataaggaaga 120  
 caatcaataa ataaatcatg ctccgacttt atcacataac ggttcaccat acgtgcatgc 180  
 tacgggaata acaaacttta acacaagtat ttctcaaatt cacaactact caactagcat 240  
 gactctaata tcaccatctc catatctcaa aacaattatc aagcatcaaa cttctcttag 300  
 tattcaacac actcgtaaga taattttatt attaattctt tataacctagc atattaggat 360  
 tatttaagaa aattaccatg ctatttaaga ctctcaaaat aatcta 406

<210> 6290

<211> 122

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-D9

<400> 6290

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 gtcgaagtca tacagaattg cagcaccaca gttgaacagc gaccgcggga acgacgtgcg 120  
 ag 122

<210> 6291

<211> 338  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-057-Q1-E1-E10  
  
 <400> 6291

gtattagaat tagaagttgt aaatatgcat tgttgtatcg cgacctgaat gaaataaacg 60  
 aaataatgct cttgttcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc 180  
 cgctcaaaag gatcaaactt aatttacctt tgaatgcaac ttcaaacttc ttcaaaattg 240  
 taaccaaact taaattcaag ggccttcgtt taaaaacttc ttaacgggaa aaacccgggc 300  
 ttaaccaaac taaatcccct tgaaaaaaat cccccctt 338

<210> 6292  
 <211> 312  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-057-Q1-E1-E5  
  
 <400> 6292

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 ctgaacaggc tgtaaaattt aaggagagaa ataagctgac agcctgcccc tttctacttt 120  
 gcagcagcca gatcaatgtg catataactt gcgctcattc cttccaatat gtagtactct 180  
 tccaagttta taaaatacga aagtggcccg gcacgcaccg ttccacaccc ccaaaggat 240  
 caaacctaac aaacgcggcc gctccacatg atccaccctt acgtacgcgt ccatgccatg 300  
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<210> 6293  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-057-Q1-E1-E6  
  
 <400> 6293

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caaggcaatg aacgaaagaa ttctctcggt ccttgatgcg tctggctctg gccgcgttga 120  
tcttgggatg ttctttgcta gcattgctcc aatctgttct gggcctgtgg ataggcgcaa 180  
gcgtgtcgtc ttcgatgcac tcctttggcg tcttgcaagc gaaggtggta ggggccagat 240  
caggaggagt gacgcgctaa gttacattaa acttctccgt gccgtttaca taccaaccca 300  
tggggctagc gacatgcttg aaatgcatgg ggagtctgac cctaccatgg tatcgtaacac 360  
acaggttcct tgagatgttc aatgatcctg attggggttt tggaattc 408

<210> 6294  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-057-Q1-E1-E9

<400> 6294  
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aattaacatg agaaaataga ggagattgcc taatacatgg aaatgtaatt atatccctaa 180  
aaaaattatc cacacgagtg gtgcaacgca atacacetta tatttcaggt tctttctcaa 240  
aatcctatac accttatatc aaggaacgga gggaatactt acttactcgg tcaatcaatt 300  
aacacgacat ccgctagccc cattacatgt gcacacggat cggcaatgga tcgatcaacg 360  
gctggagacc gc 372

<210> 6295  
<211> 148  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-057-Q1-E1-F8

<400> 6295  
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tacttggttc catcatcgcg tcgattgg 148

<210> 6296

<211> 382  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-057-Q1-E1-F9  
  
 <400> 6296  
  
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 tgctgcgctt tttgctaccg ttgctttcgc agctatatct actgtacctg gtggaaatga 120  
 caacaatgga gttgcgattg ttgtccagac tgccctcctt aggagattct tcagctttaa 180  
 tgccatagct ctgttcacat cattggcggg ggtcgtgggt caaataacag ttgtcagggg 240  
 tgaaacaaag tccgagcgaa aggttggtga ggtgatcaac aagcttatgt ggctggcatc 300  
 agtttgcaca accatttctt tcattgcctc atgctacact gtgcaaggcc gccatttcca 360  
 atgggcagca atactggta gt 382

<210> 6297  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-057-Q1-E1-G11  
  
 <400> 6297  
  
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 cggcacaaga gaggctagca atgggtggaag ggtgagagtg cgtatgatcc atggactcat 120  
 cattagtcgt aaagaactca tatgcttatt gcaaaaatct acaagttatt gaaacaaagt 180  
 actacgcgca tgctcctagg gggatagatt ggtaggaaaa gaccatcgct tgtccccgac 240  
 cgccactcat aaggaagaca atcaataaat aaagcgtgct ccaacttcat cacaaagcgg 300  
 ttcaccatac gtgcatgcta tgggaatcac aaacttcaac acaagtattc ctcaaattca 360  
 tgattactcc actagcatga ctctaatac accatcctca tatctcaaaa caattatcaa 420  
 gcatcaaatt g 431

<210> 6298  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-G6

<400> 6298

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attcgtaagt acggcaagca cgtgttctcc cacatatgac attctgctgc gtcaagcagc 120  
cgctggcggt tcagaagggt gcctactacg ccatccatca catgcggggcg atcgtaacggg 180  
accatcatca acttctgcta ccgagtaaac tcaaagattg ggccgcgagc gtgtcggcaa 240  
tccaggacgc ggacatcaga caagaattct ttcgcatcca gtcggagttt gcagaaatca 300  
tccatcaaga tgtccttctg acctcggggc agttctacct cagaaatcaa ccgtccaaca 360  
gtgacatcga cacaatgcta caaatgcagg ctgacaacgc ccgttatttc atgactccca 420  
tgatagacgg cggcttcacg cacgct 446

<210> 6299

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-H10

<400> 6299

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attgctatga aaactatgct cataatgtct atgtcaaaga atttattgaa agaagaccg 120  
ttgcttctaa agaaaataat gatacgcatg aatctttaga taattgtgat ccgatgatt 180  
tgattgaaat atcccttgat gaacatgatg ctttctatct ttgtggccat gatgccaata 240  
tttttgaaga cgaatttgct ataattcctt atgttaaaca tgagatcatt gctattgcac 300  
ccatacttga tagttccttc cacgaaaagc atgactgcaa tgattttact ataaattccc 360  
ttgatgtcaa ttgtgctaatt 380

<210> 6300

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-H9

<400> 6300

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 aatctgaaaa ttttgacata cttgaatatt gctatgaaaa ctatgctcat aatgtctatg 120  
 tcaaagaatt tattgaaaga atgaccgttg cttctaaaga aaataatgat acgcatgaat 180  
 ctttagataa ttgtgatccc gatgatttga ttgaaatatc ctttgatgaa catgatgctt 240  
 tctattcttg tggccatgat gccaatatct ttgaagacga atttgctata attccttatg 300  
 ttaaacaatga gatcattgct attgcacca tacttgatag ttccttcgac gaaaagcatg 360  
 actgcaatga ttttactata aattctcttg atgtcaattg tgctaataat atgcaaaacc 420  
 t 421

<210> 6301  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-A1  
 <400> 6301

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 ccagaagcac aaagagggcg gaagcagtag cgctcctgct gcccagcga cagctgcgac 120  
 ggtggtgacg agttcggccc cgacaggcag caccttcctt gccgttcagt aggcgcccgt 180  
 gccgaaagaa accaggaaca agcttcccct tcggttcatt agcaccagca gcccttggca 240  
 acatcctata ccatttggtt atttgtttcg gtaataccaa cctcattggt caaaagacaa 300  
 aaggaaaacc aaaccgaaat aagtggctcc cctctgtgat ttcataagta cactggaaaa 360  
 caggggaggt gccagattaa tagaaatccc aaacagc 397

<210> 6302  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-A10  
 <400> 6302

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 ttgagagttg gtgcaaactt cgccggtgcg tccaaacccc gtgatatgat acgctctttc 120

acacataaac ctccttatat cttcctcaaa acagccacca tacctaccta ttatgtcatt 180  
tccatagcca ttccgagata tattgccatg caactttcca ccatgcattc cgtttatcat 240  
gacacattca tcattgtcag attgcttagc atgatcatgt agttgacata gtatttgtgg 300  
caaagccacc gttcataatc ctttcataca tgctactctt ggattattgc atatcccggt 360  
acaccgccgg aggcattcat atagagtaat attttgttct aagtatcgag ttgtaattct 420  
tgagttgtaa ataaatat 438

<210> 6303  
<211> 429  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-A4  
<400> 6303

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cgagatttct gttgagtttt gtgttgtaga gttttcaagt tttgggtgaa ttcttttgat 120  
ggattatgga acaaggagtg gcaagagcct aagcttgggg atgcccattg caccgccaag 180  
ataatacaag tacaccaaaa agtcaaagct tggggatgcc ccagaaggca tcccctcttt 240  
cgtccacttc catcggtaat ttacttgtag ctatatTTTT attcaccaac atgatattgtg 300  
ttttgcttgg agcgtcttgt attatttgtg tctttgcttg ttagtttacc acaatcatcc 360  
tttctgtaca cacatcttga gagagccata cattaattga aatttgtag aatactctat 420  
gtgcttcac 429

<210> 6304  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-A6  
<400> 6304

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gcggggaaag aagggatatg agaaggagaa aagcatttcc aatagcaagg tgaaggcttc 120  
taaagtacag aacgaagaaa ccggttctga tgatgaatgc aagccaaaat ctgagaagag 180

aagtccagct gcgggcaaac ccaagatttc caagattaag aaaccaaag gtgaatatga 240  
 tgatacaaag gaggaaaaga aaataaaca ggaagttggt atcaagaaag atgaaacgaa 300  
 ggctgctggg gtgaagaatg agggggcgac ttctacatgg ctgaaaccta tgatgtccat 360  
 gtcctcggca tcgatctttc tatcaacatg gtttcgttcg caattgatcg tgccatcggg 420  
 cgctcatgct 430

<210> 6305  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-A7  
 <400> 6305

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 tggagtgact ctttgttgca tgttgaggga ttgttatatg atctatgtat gttattattg 120  
 ttgacagaac ttgcactagt gaaagtatga accctacgcc ttgtttccta ccattgcaat 180  
 accatttacg ctcactttta tcattagtta ccttgctgtt tttatatattt cagtttacia 240  
 atacctttat ctaccttcca tattgcactt gtatcactat ctcttcgccg aactattgca 300  
 cctatacaaa ttactattgt attgggtgtg ttggggacac aatagactct ttgttatttg 360  
 gttgcatggt tgtttgacag agaccatctt catcctacac ctcccacgga ttg 413

<210> 6306  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-A8  
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 caagttcagt atccgcccc gcattggcca tatcgccatc cgcaatgccg cgctaagtga 120  
 gcacatgctt gccgtacata catgccgaag aactccacgc cggcggctcg ggtcgcgtct 180  
 gccgccatgg tagcgtggc tgtcgctaac cgcgtgctcg aaaagctcgc gctggtgccc 240  
 ctcaagtcct acgccttctt cctcgctcat ctacgatgt tcgggtacct cggcctgtac 300

gtttcaatac gctaagtgat gtaccgcgcg ggggtggtga ccctggacat gctggaactg 360  
ccacagatcc ggttcgctgt c 381

<210> 6307  
<211> 146  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-A9  
  
<400> 6307

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gtgacgtcaa gcacaagcac tattatcacg ggaacatgct ataatgatgg cgccatgac 120  
ccattgagaa gtcgagggca cattta 146

<210> 6308  
<211> 220  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-B1  
  
<400> 6308

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agaatgtcct taagcaggat agcagaggtc caagacgac gaataagcac ggctccccgt 120  
ctgggagttc ctaacgacac ctggatctcc ggggtcttca agtccttcca tccatacacg 180  
gtggcatctg gcaccaccga tacaccatcg ggctgcac 220

<210> 6309  
<211> 231  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-B10  
  
<400> 6309

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cgctacagga tgcaggattg cgtgcgcatg catgctaagt tcatactctt caaaaatgtc 120  
tgcgaaatgc aagtaagagg ccgtcgcctt atacctacc aacgggggaac aatttacgt 180

cacctatatc aatagccatg cagcagatct cactttcgca atctaggata a 231

<210> 6310

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-B12

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tatgctagtt tgctcgctct ttgctatgc cattgctatg atgcctacca attgcttgca 180

agcctcccaa attgccatgt caaacctcta acccaccttt atcctagcaa accgttgatt 240

ggctatgtta ccgctttgct catccctctt tatagcgttg ctagttgcag gtgaagattg 300

gaggtcgttc cttattggaa catcttttat ttacttggtg ggatatcatt atattgcat 360

gttatcttaa tgcacctata tacttggtaa aggggtggaag gctcggcctc tcgcctagtg 420

ttttgttcca ctcttgccgc cctag 445

<210> 6311

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-B2

<400> 6311

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tgcgatggcg ccatcggaac cgagccgtcg tatgaggacg ccgttccaga tcaggttcta 120

cacctcttct cgtcggccat caagcacgca cgtcgccggt cgcctccatg tcgccgcctc 180

tcgagagctt tgtgcgtgga agagagccgc ggggtgtgag aatgagatga aacacgttcc 240

aagggtcttg ctgcaaagt atgctgtgcc ggttactggg tgggtcccat ggggtccaggt 300

ggcaacggtc tgccagtcaa cgcaactgca gcgagtttgg gacctgggtt gtacgccttg 360

aaaacatttg ggaccaatt ctatactttt gaagtttttag gactagattg acaca 415

<210> 6312



<211> 171  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-B3

<400> 6312

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aagtgaacaaa gattttgcaa caagcctgac atgcgagctc tacatgatcg aagcttattg 120  
tgacatcaaa gcgacttcag agctcttaga ggaagacatc gcagtcaaag t 171

<210> 6313  
<211> 426  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-B4

<400> 6313

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cagcgacagc gactgagcca gctccggccg cgtgcagtgc aggggagatg aacgcgtggg 180  
ttaatttggg gcgtgtggta gcatatgtat gtaatgcttg acatgtctca tggatcttgt 240  
aatgtaataa ccggctgcac tgcattgtgc ttgtaataat aacgttaagg aatttccatt 300  
ggtaatttgg taccatcctt tttccaagc tttttgtgta tgtatgtatg tatgtggtgt 360  
ctctgttcat ctctggatct ctccgaccga gcgtgattaa cggctggggg atcttttagga 420  
atggtt 426

<210> 6314  
<211> 428  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-B6

<400> 6314

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cacaatcatc cttgatgtac acaccttttg agagagacac acatgaatta gaatttatta 180  
gaataactcta tgtgcttcac ttatatcttt tgagctatat agtttttgct ctagtgcttc 240  
acttatatct tttagagcac gtcagtgggt ctattttata taaataattg atctctcatg 300  
attcacttat attattttta gagtccttta gaacaacatg gcaattttct tttaggcata 360  
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ttgagata 428

<210> 6315  
<211> 354  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-B7  
<400> 6315

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ctcagggttat attggatggg aatttatctt acaatacaac tacacctttc ttgaatcaga 120  
ttcggactgt ttgcgtgaaa ttttgctcta tagctatctt tgggtggctt tctttgtttt 180  
gctttatgtt gtatagtcag tagaaaactc aagcccatc atctaacaat tctgtagtaa 240  
tgactgaaac tattcgagga caaatcttgg attggtgttg tcggttgaat ttagagttgc 300  
atggttgaca cgggtcaacat ggcaaagaaa gtatagaaga tttgccaac cagg 354

<210> 6316  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-B8  
<400> 6316

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tggatcccaa tgtcgtactt caaatgcag cagcgaagat cctaggggtca gtgaatctgc 120  
ctacacttca catgtgtaaa tctgcacttg atgggtctcat tgcaggtctg gacaaatttc 180  
cagaggatca agatatatat ggtgttctgt ttccattgg caacaatcat gggagctttt 240  
cagccaatat agccaacat ttagccaacg atatcaatat ggcattctgat ggagagctga 300

tcttgataa acctagaatc aaagcattgt taatggcttc tgctgtggct gcttatgatg 360  
 ataaagacat aaaactggat ataccgcag ttatattatc acatgcaatt cccctatttg 420  
 ggatgatctc gtgtgcact 439

<210> 6317  
 <211> 213  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-B9  
 <400> 6317

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 tagattttga attacaccat gttgaaggcg ctccatcata gcataccatg tatggctaca 180  
 tcccttcgag tattggetta actaactttt agc 213

<210> 6318  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-C1  
 <400> 6318

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 cgccagcacg acaggacctg cgcgaccggg tgaggaggcg taggagaaga aaatgggtgca 180  
 gcaccactg tatttcgtca gcaacctctt gcagggggct aggtcgaggt actcaggtgt 240  
 gcaaaagctg ctctttgggc tccttatggc ttcgaggaag ctgcgccatt acttccaagc 300  
 gcacgaaatc acggtgggtca cccgcctccc attgcaacgg atactacaca acccagatgc 360  
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<210> 6319  
 <211> 430  
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-C10

<400> 6319

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ctaccatttt cctcggagag aagtagccag aaacagcagc gccatggccg gcatcatgca 180

caagatcgag gagaagctcc acatgggtgg cggcagcgac gagcacaaga aggacgagga 240

gcacaagaag gcggaggagc acaagaagaa ggacggggag cacaagaagg acggcgagca 300

caaggagggc atgatggaga agatcaagga caagatcagc ggcgacggcc acggcgacgg 360

caagaaggac ggcgaccaca aggagaagaa cgacaagaag aagaagaagg acaagaagca 420

cggcgagggc 430

<210> 6320

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-C12

<400> 6320

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cctgaaacct taatcatgct gacatcagca cagtcacct accatttggc gatgatgtag 180

gctccaacgg gacacgacat ccgtaatgcc ctcggtgatc atgaccttat gtcgctactt 240

tcgcctaagg attatgtgat tgctttcaag caccatatca gagagcgac cgagatgcat 300

tagcgaacct tccccgaaag cgaacttcac aatacatgct accagaagtc gattaagaca 360

cgatgggata tctgccacga atgaggcaag tacatgcacg ccaattcatt g 411

<210> 6321

<211> 406

<212> DNA

<213> Triticum aestivum

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<400> 6321

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gtggctcttc acgtcattgt caacattagg atctacggct gggcataata ggtcgcataa 180  
ggacacattt aatgtgtcac attttctcca catcagctgt gaacactgtg catatcgtgt 240  
catgctgcct gcgtttaaga cggttgtaag acagcgaagt gcttgataat gtaaactgaa 300  
gaagtcatgt atcagatgta caaccgcac aagcatggag ccaaattcaa ttcaatggcc 360  
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<210> 6322

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-C4

<400> 6322

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tcaaggcaac agtcatagac tgctacacct gatagcacag gaagatgcac tatcaggatc 180  
agttgcctcc tcaagggtaa aatcaagcac tgctcgagct tagatcagtc atcttatgca 240  
tatacattga acgtgcagtc ctcatTTgaa gacactaacg acacatacgc cattcacgac 300  
ctggatgcat gtggattccg catcgtgaac ctgattagtc accatgtatc cgca 354

<210> 6323

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-C5

<400> 6323

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gcagcgtaat ggagtgattt tcaaggctat tccaacttcc gttctctctt ggagatcttc 120  
gtttcgggca gatatgcttt tgcttaagca taggatcaag gacaagtttg ctgatagact 180

ttctagttgg attgatcagt tcttaacata attatcatgt tgcctcaagg tttcactagg 240  
 actggagttg ggtacggtga tctcttgttt atttgggaca tctgtaaata tttttattgc 300  
 tttaatatat ttaccgtaga acgattgttc tacggttttc ggttcaaaaa aaagggtgcaa 360  
 ggctggtcac gcgtaggatgc ctacattcca gggccaattt catcctgttt ttctgggcc 419

<210> 6324  
 <211> 243  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-C8  
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 tactttgtca acaacaagtt gaagtagaaa aagtaagtaa aaccggccgc acgagaggat 180  
 tcaagcttac gtaagcgtgc atgcaacgct agagctcttc aacagtgtca ccaaaattca 240  
 att 243

<210> 6325  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-C9  
 <400> 6325

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 ctgtcatatc atttggcaaa gccaaactgg tacttgccctc acaaacatct cctctcgaca 120  
 taaacttgga ataattatgg tgatcaaatg gctcaatgaa atgatgccaa attgtgtgga 180  
 gagatgtttt atgggtataa gaatgatctg ggaatttatc atgatttttg aagcaatata 240  
 aaatatactt gcttcataac ctaacaatat tgccagaatc aatgatttgc ccctgtgctc 300  
 acatagataa ttgtatgagg ctgacaatgc gtggaatatg ttaatatgat cacattaacg 360  
 agtgtgcaaa agttcagcta atttgggtac tcttagctag tacttccttc 410

<210> 6326

<211> 413  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-058-Q1-E1-D1  
  
 <400> 6326

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ccggcccgcc gccatacgcc cgtcaaaaaca ccgagacctc cccctagacg tacgccgaca   120
attgccatgc atgcatgatg ccagtaatat ggtatgcgaa ttaactaaag aagaagccac   180
atatatcatg gaggtaccog gatatataga tagtgctcga tccataactt atagctggat   240
ttcaacactt atatatctag atttacgccc ctcaaaaaat atatttagat ttatgttatt   300
acagtagaaa caatgtcatg tatgaccac ggtgattgta cttatactat tcatgcaata   360
tatatgtata taggaaaaaa aaacaataga catcaaaaaa aaaaagcggc cgc           413
  
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<210> 6327  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-058-Q1-E1-D10  
  
 <400> 6327

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gaccagtget ccgccctgtt tacgctgcta actccccaaag acttccttcg attacccccg   180
ctcgcttcac tccttcgacc gatagtgtct ggtcaccttc ctccagataa acattaaatc   240
tcaatattca gatgtgtgtc atttgaaaat atatcaaaga tgtgcttagc ctaacatggt   300
tgcgctctag tagatacatg cataca           326
  
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<210> 6328  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-058-Q1-E1-D11  
  
 <400> 6328

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 taagactgta tctgaatgcc cgtacattga acaacactga cagtttttgt cttctggcct 120  
 atgaaagctc cgtctaagga aggctgactc aaggatccat gcccttgatt cttgctccga 180  
 aagtggacct gaaaaaacta caagttcgac gattgcgcga ggaacacaat gggttttctc 240  
 tgaatcatct ggtaattttc ccagtcttgt acatgttgtt ctttgaatca tgtgggtattt 300  
 ctaagtgcac tgcattgtgt gtgggtggata caaaaagagg acgcgacgac tgatggctgt 360  
 tctctttaca cttggcgtgg ttgacaggct atggagcang caattttgct atttgggtcaa 420  
 tgatggagat gaattcggga gagatgtgga cggg 454

<210> 6329  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-D12  
 <400> 6329

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 gtgaacccat cagtcggata aagcaccac tgggcaacgg tgatctgacg caccgccgca 120  
 gttaagtttt catggcagcc acttaaaggt tctcatcctc tcccatcccg atcgacttac 180  
 aggcgccgct gtaaagccat tatcatgatc taggaaacca cttttcaagg gtgtcgcgat 240  
 atccctatgt ttcaccgaca acgtcttgaa ttatcagctt ctaccggcaa tcagtcccat 300  
 aggcgatttc ggcattattag gattacagca gctcctggga gtctgcatcg cctattataa 360  
 cctccagata cctatgccca gattataaaa gctccac 397

<210> 6330  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-D5  
 <400> 6330

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gcagctgtga ctatgagttg gtggagatat tctgccatac taattcgtcc atacgagttc 180  
ggctgctgag gaaggttgat ggttacaggg cagtatttac aagggagaca actgtggaga 240  
ccataggcaa ggatgagtac ctgaagttct cccaccagat cccttgcttc catctgacaa 300  
acgaaggagg aggcaagctt cggggctggt tggagctcga tccttattcc gtgccggagg 360  
agttttctcct gactgactga ccttgttcat gcatggtgaa cctcctggaa ggctctttt 419

<210> 6331  
<211> 345  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-D6

<400> 6331  
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atactacaag tcatcactgt cttcagccat cattctcagt cactgaacca atcaaatcaa 180  
tactatTTTT catcaatggt ttcttgaggg tggtagttgt tcattagtaa agaactaagc 240  
taaaattttg taaacatagt ctcaacataa tgtgtcaatg atttcccata ctaccattgg 300  
acaaaataca ctcaatgtgg tccaatgcac agattgtctc accat 345

<210> 6332  
<211> 441  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-058-Q1-E1-D7

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aagctgtgac caatatgtac acggccgcat gttgcgttgc gtgggtgctg tcgccgttct 180  
tgtgtactcc attgttgtgc tgtgatcatt cttttgaata aatcggctcg atcttcaaaa 240  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaagaca caccaaagga tcaaaaaaaa aaataacaat aaaaacaaaa tcaaaaaaca 360

atcaaacaca aacacataaa ttcaaaaaaa caggcggtcg ctaaaaaaag gggggccccc 420  
caaaaaatcc ccccttctc g 441

<210> 6333  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-D8  
  
<400> 6333

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gatctgaaag gtttagcacta ataataacag gatatatctt cttttcatca agataagcat 180  
atttcaaagt atcaggtaat tgtttaagct caaacactgg atcacccttg ggtggaggag 240  
tatccccaag gatttcaaca ggcaaattgt gtttcaaac aggcatttga ttaaagaata 300  
tttcatctaa ttcttctctc tcattcataa acatatcatt ttcatgggtct agcaaatatt 360  
gttctaaatg atcaatggga ggcacgacaa tagaagcaag atcaataatt tcctccttac 420  
taggcaaatt ttttgtcatg gggttgt 447

<210> 6334  
<211> 462  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-E11  
  
<400> 6334

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ggaagttatg aggacctctc tattgcaatg gtgctatgca agctacagtg aggtatttag 180  
ctctggatg catcttctctg ctgttcgtgt ctctgtagag agtattctga gatatgggtct 240  
gcctgcacgg ttctgtctg ttgtcctagc accatctaca aagagtgaga agaaagtaag 300  
gaacatcttg gaagggctat gcggcaatgc caacagcagc tactggagat ccgaagatga 360  
cgtgggcatg gctgctggcc tgggaggcga gacagagtcc cacccttatg tctccttcac 420

cataaaacttt gtctgagcgt gtttgatgta tattatatttg tg

462

<210> 6335

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E4

<400> 6335

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tgaagtggct gaagcccggt gggcatatatt tcatcaggga atcgtgcttc caccagtctg 120

gggattccaa gaggaaagtg aaccgcacgc actaccggga gccgagggttc tacaccaagg 180

tgtttaagga atgccactcc tatgaccaag aggggaattc ctttgagctt tctctggtaa 240

cttccaagtg cattggagct tatgtgaaaa gcaagaagaa ccagaaccag atatgttggc 300

tgtgggagaa ggtcaagtgc acagaagaca aaggctttca gagattcctg gacaatgtgc 360

agtacaaatc cactggaatc ttgcgttatg agcgcgtgtt tggg 404

<210> 6336

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E5

<400> 6336

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atataggaat agtggaccgt ggacgctagc gccatcgtga ataaaggtta tgctctcggg 180

aaattcctta gtgaagactt gtctgtataa gaaattcaag cactcgatag ggcacgaata 240

cgaacaagag ggagatataa cacgaactct gcttatgtgc tccgctgtgt ttcgttggtc 300

agataaagac ctcatgggtt acgctgtgta gcctcttcta aaa 343

<210> 6337

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E6

<400> 6337

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tttcccgggg ggcccaaata cgggcaaccg gtggccggca attttccggc aagcaacttg 180  
gattccgtct gcgcctccaa ctctgcccac aacaggcgaa gggctctgtg tgtgaaaatt 240  
tacgatgata tgtcggtaaa tattaaattc aagagatctg aggtgatgaa aggtgagaag 300  
atgttacaag ccaggtgctt gtggagaggg cggagaagag cggaaaaaaa aagagatgtg 360  
aacatctaga ggcttttgcc atgttggtgt cgctcgcaag gcaagccgcc accaataata 420  
aaaagttttt ttttgcctcg ggggg 445

<210> 6338

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E7

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acctcgcgat tgtggtgcct gacgctgacc tcgcttttg gtgcctaata atgacctcgc 180  
gatggtagtg gcgccggcga ttccacagct gggcgacagg accatgccaa ttgtggtaga 240  
ggagtacatc cgcgttgga tttgccactc tgagcgcac aggttgatga aggagaagaa 300  
ggaggagtga agatgttaag aaaatgaagt ggtaatgtta agcatgttg gttaaagctt 360  
gtcaatgtta agtatgtcag ctttaatttt atgcatgctc atggatgctg tatgacagtg 420  
tcacct 426

<210> 6339

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-F1

<400> 6339

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accgggacta aagggtgagc ctctggcccc gattcaagcc accaactggg accaatggtg 180  
gtggggccggg agcgaggccc attgggtccc gtttgtccca ccaaccggga ccaaaggggc 240  
cggacgaacc gggaccaatg cccccacgag gcccgcatg cgctggccg cacgaaccgg 300  
gaacaatgct cacattagtc ccggttcgtg actgaaccgg gactaatgtg aatattgccc 360  
tgtgaccaa gcccagtttt ctactagtga attctcatgg agaacgaaac atttgaccat 420  
ctagggcggtg cctccttcc 439

<210> 6340

<211> 470

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-F11

<400> 6340

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tagaacgctt caaaatttca taaaaaagat taagaaatga aaataggaag tccatattat 180  
aaagggtggag aagttcgatg attatagaaa attcagattt tccttggtat taaaaaatgg 240  
aaacaagaag ttcaaaaatg aaataataag aatttcaact tttaaaaaata gagcgcttca 300  
aaattcataa aagaggatta agaaattcag attaaaattc ataaaaaact cagatatctt 360  
catgtaacca agaaacgttc agattgataa ctaacagaag ttcacgtact acgcggtgtg 420  
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<210> 6341

<211> 311

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-F3

<400> 6341

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 tcttatgagg gctggcttct ccacccctct gcgttgaatc ctgctggagg gggttgtctt 180  
 cggaactgtc cggggtgtta ttgtctcaa aaaaaaaaaa aaaaaaaaaa aaaaaaacg 240  
 gccgctctaa aggateccaag cttacttacg cttgcatgca acttcatagc tcttcaaaag 300  
 tgtcacctaa a 311

<210> 6342  
 <211> 224  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-F5  
 <400> 6342

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 cgtactaaaa ataatgccga aaagacggat tgaaacataa ccaatccaac cgggataagg 180  
 ccaaggggaat ccggggcccaa aatccccaag aaccaattag gcaa 224

<210> 6343  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-058-Q1-E1-F6

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 aaaagggggg ataacaatcg gtggggaagg aaatgatggg atttctttcc tcccaccttt 180  
 gccaacgccc caatggactt ggaggggaag aaaccagccc cctccagccc tatatatagt 240  
 ggggagggcg atgggagctt cacccttgcc cctggcgag cctccccct ctctaactcc 300  
 acctcctcct cggtagtget tggegaagcc ctgccggaga actgcaagct ccaccaccac 360

gtcgtcgtgc tgccggagcc ctccctcaac ttctcctctc nccttgctgg atcaggaaag 420  
angagatgtc ccaaggctgt acgtgtg 447

<210> 6344  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
  
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<400> 6344

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gcatccttat gagtggcggg cggggacgag cgatggcttt ttctaccaa tctatcccc 180  
taggagcatg cgcgtagtac ttggtttttg atgacttcta aatttttgca ataagtatat 240  
gagttctttt gactaatgtt gagtccatgg attatacaca cttttacctt tccgcctttg 300  
ctagcctctt cggtagcgtg cattgccctt tctcatcttg agagttgggtg caaacttcgc 360  
cgggtgcatcc aaaccccggtg atacgatacg ctctatcaca cataaacctc cctatatctt 420  
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<210> 6345  
<211> 454  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-F8  
  
<400> 6345

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tcatgcacaa gcatccttgc atacaaagga ttttcctaga attttctaatt attgagcatt 180  
cttctgttaa gcgtgccgt actatctttt tggctcatga gtttagattc ataataaaag 240  
aggccaaaga aatatttgcg cattataggg tggacgcttg ccgtcctccc atagagtcta 300  
tcctttttta tcaagaagaa ataatgcgtt ttcaatctct agactatgtt tctttcaatg 360  
aaaatcttag aaaaagggtt cttccaatg ttttagttga tagaatttct gagcttaatg 420

atgatttggg caattcgaaa taatgaacta ggat

454

<210> 6346  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-G10  
  
<400> 6346

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caaggtaaaa ttcaaggaca ccaaaaagcc taagcttggg gatgccccgg aaggcatccc 180  
ctctttcgtc ttcgctctatc ggtaacttta cttggaacta tttttttatt caccacatga 240  
tatgtgtttt gcttgtagcg tattgtatga tttgagtctt tgatttttag tttaccacaa 300  
tcatecttga tgtacacacc ttttgagaga gactcacata atttgaaatt tattagaata 360  
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<210> 6347  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-058-Q1-E1-G11  
  
<400> 6347

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tgatgaacgc ttactgcgac cgtcagtctg tggatctcaa ctccactgct ttcctttttg 180  
atggtcgtag gctccgtggt gagcagaccc ctgatgagct tgagatggag gaaggcgacg 240  
agatcgacgc catgcttcac cagaccggag ggtgctttcc tggcccttag aaggagcttg 300  
ctgcagcctg gctgttctat gtcgtatgct accttagaa ctagagtaaa atgtaggaag 360  
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acaacatcgg agtactgttg atgtcgtgac tg 452



<210> 6348  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-G3

<400> 6348

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 ggtgtcctgc gccgacatca tctccctcgc caccgcgcac tccgtgaaac tcgccggcgg 120  
 ccgggactac gcggttccca cggggccgcg cgactcgctc gtctccaacc gcgaggagtc 180  
 cgacgacaac ctgcccggcc cggacatccc cgtgccccag gtcacggccg acttcgtgaa 240  
 ggccggcttc accgccgagg agatggtgct gctgctcgcc ggccggccaca gcatcggcaa 300  
 ggtcagggtgc atcttcatcg agcccgacgc ctgcccctg gaggcgggct atcacgccag 360  
 catcagcaag ctctgcgacg ggcccaaccg gg 392

<210> 6349  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-G5

<400> 6349

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 gcgaaacaaa ttaacaacga gtgtagcagt acatccaatt gaaatgtttt atgtggcctt 180  
 ggcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaacgg ccaccacaaa ggatccaccc 300  
 aaaacgtcaa catacaaaaca acctcaagcc cctctcaata gggcaaccaa aattcaaaaa 360  
 aaaagggcgc ccttaaaaaa gttcctgtct ggaaaccctt tggggtaacc ca 412

<210> 6350  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-G6

<400> 6350

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ctttattttt gtgtcatacc tatgtaccgt gggactgaaa aatgttgtat cttcagcaga 120  
atggagacat cataaatatt gatgtaaatg tgttccgaag tgtaagttca ctctcctagg 180  
attgtggata tgcttatgtg gtatgtttgg catacagtcg gatatttgctg acaaattgct 240  
tgcaaggctg ataggtttat tgagatgcct catatgcaag ctcataaccc actgttaaag 300  
ttgtctgttg tggagatgac tgggttccat ggctaataa acacatttta cctgttatgt 360  
acttcatctg agctggatag caaattgcat tttaatgctg at 402

<210> 6351

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-H11

<400> 6351

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caggtgcgcg ctgaaccacg gcgggtgctg ggaggagacc aagggggagc gcaccttctc 120  
cgctgctcg gacacggcgc tgagcgggtg ccgggtgccg ccgggggttc aaggcgacgg 180  
ccacaaatgc gaagacctgg acgagtgcaa ggataagctg gcgtgcacct gcccgactg 240  
ccactgcaac aacacctggg gcagctacga gtgcggctgc aggggcaacc aggtgtacat 300  
ccgcggggag gacgtctgcg tggccaacag catgtccagg ttccggtggc tcgtcgccct 360  
cctgcgcgtc tctgcgcg ccggcctagg ggtagccggc ttcattctct acaagtacag 420  
gtcaggtcg tacatggact cggagatcat ggccatcatg tccc 464

<210> 6352

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-058-Q1-E1-H5

<400> 6352

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 aaattggtgt ggaagccaga aatgcagtac acgtaggaga tgatgaaact gcagacaagg 120  
 cgggtgctaa cgctattgga ctcaagtgtt ggtatgcaat tttctttcat acattgtggt 180  
 ttcttccccg tgcagacatc gtgtttcaat agtatcgggt attattaatt tatcgggaca 240  
 aaaagcgaag gaaaaaaaac attattgaat atctgggtcg gtggctgacc ggctggctaa 300  
 ctgattgtta ctgatgttgt ccatttttag gctgtgggga gaagatgtga agaaattttc 360  
 tgagatacag caccagatcg tagcaaaagg ctcacgatga gtgcagggca atgtctctgt 420  
 ntgcctgatt tgttcatttg attgcaaa 448

<210> 6353  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-H6  
 <400> 6353

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 tggetcactt tatcccagtg aaagccacct atacaagtgc gaagttggcc atgatatata 120  
 tgaccaggat cgtatgtctg catggagttc cgaggaccat cgtatcagac agaggaacac 180  
 agtttacctc aaagtttttg aatcagctgc accagacttt ggtactagg ctagagttca 240  
 gtacagcctt tcatccgcag acagatggat agaccgaggg agtcaatcag atcctgaagg 300  
 acatgttgag agcgtgtgcg ctagattatg gatctagtag ggatgataat ctactttacg 360  
 cagagttctc atacaagaac agttaccaag ccagtttgaa gatgaccctt tttgagcctt 420  
 tgtatgggag aagga 435

<210> 6354  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-H7  
 <400> 6354

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ctactaatg ctgcagtag cacctgggta tttgatactg gttctgttgc taatatttgc 120  
 aactcaaac atgggctacg gattaagcga ggattggcta aggacgaggt gacgatgcac 180  
 gtgggaaatg gttccaaagt cgatgtgatg gtggtcggca cgctacctct acatctacct 240  
 tggggattag ttttagacct aaataattgt tatttgggtgc cagcgttgag catgaacatt 300  
 atatctagat cttgtttgat gcaagacagt tattcattta aatcagagaa taatggttgt 360  
 tctacttata tgagtaatat attttatggt catgcaccct tgaagagtgg tctatttttg 420  
 ttgaatctcg atagtagtga tacacatatt 450

<210> 6355  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-058-Q1-E1-H9  
 <400> 6355

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 aattactaga gtcctgttg ctgatggtat gtccaaagat acaatcctaa caaacttctg 120  
 agtttcacta gaacacgtat cttgcccttt tggctgttgt acacctacca gcacactcta 180  
 gtggctcttg tttacagcaa atgtgatgcg acttagggtc gtgaaagaga tactgccacg 240  
 tactaacaga ttacggcaat ccattttccc tcatgctgca tgttgcgcat caaccattgc 300  
 atgttgatat cctgatatat taatctcaat gacagaacaa aatgcttggt ggtgccctga 360  
 tacatcattc gcctgcaagg tgatgatgca ctcgaaaagc ccctttctag aaaagtataa 420  
 cggggctcaa tatgggacat tg 442

<210> 6356  
 <211> 300  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-059-Q1-E1-A9  
 <400> 6356

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 gacaagaacc tgaccccgat gtgcaacaag atcttccacc tggggacctg catctgagac 120

gtacccttgc atgcaggcga tcgctcatgg gaatgccagc gctggcacat gcaacagcac 180  
 cgatatgcac agaattgagt ttgccattct gttctaacca ggatcattgc ccacaaatct 240  
 agaatgccat catgaccgga tccttttacg actttttccc gggcctgccc tttgttgagt 300

<210> 6357  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-059-Q1-E1-C4  
 <400> 6357

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 tgttgttggt gttgttggtg ttgttggtgt tgttgttggt gttgttggtg ttgttggtgt 120  
 tgttgttggt gttgttggtg ttgttggtgt tgttgttggt gttgttggtg ttactgttgc 180  
 tgtcgctggt gctgtcgtg ttgctatcgc tgttgctggt actgttgctg ttgttggtgt 240  
 tgttgttggt gttgttggtg ttgttggtgt tgttgttggt gttgttggtg ttgttggtgt 300  
 tgttgttggt gttgttggtg ttgttggtgt tgttgttggt gttgttgctg ttgttggtgc 360  
 tgttgttggt gttgttggt 379

<210> 6358  
 <211> 109  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-059-Q1-E1-D4  
 <400> 6358

aagtactaac atgttgcgac atcaagtttg gttgctatat aggttccagt catatatata 60  
 cgtgtatgcy acttcattac tctacgagtg tgtcacctag aatcactta 109

<210> 6359  
 <211> 491  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-059-Q1-E1-H3

<400> 6359

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atcttgccag atcttcaacg agttcaatgc gcgtaagcct gaggaagga atgtcttcaa 120

aggagtaaca aagaatcagc tcttcatggg aatagtttgt gtaactaccg tgtttcagat 180

actaatagtt gaattcctgg gaaagttctt taaaattgtg agacttaact ggagtctatg 240

gttagtttca gttgccattg gcgtcgtaag ctggcctttg gcttatctag ggaaattcat 300

tccagttcct gtaagacctc tccaggccta tttcaagcct tgttggaat catcacgccg 360

agacgaagac gaagcgaggc agggctaaaa aggctgcaga tcanctagtg taaatagaca 420

cgggtcagcc gaagaacagg aacccgttac gcctctccca gtggaacaga gctgccgatt 480

acctctacta c 491

<210> 6360

<211> 405

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-060-Q1-E1-A8

<400> 6360

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acatagtagg tgactataga cttgcaagat aggatcaaga actctcatat attcatgaaa 120

acataatagg ttcagatctg aaatcatggc actcggggccc tagtgacaag cattaagcat 180

agcaaagtca tagcaacatc aatctcagaa catagtggat actagggatc aaaccctaac 240

aaaactaact cgattacatg ataaatctca tccaacccat taccatccag caagcctaca 300

atggaattac tcacgcacga cagtgcagcat catgaaattg gtgatggagg atggttgatg 360

atgacgatgg cgacagatc cctctccga agccccgaac ggact 405

<210> 6361

<211> 409

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-060-Q1-E1-B10

<400> 6361

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gagttgtgag agcttgtgat ctgcctttgt accgaaggaa cattcctctg tcgccataga 120  
tccggtagga ttgcctctcg cttcttcgga aatgaaattc gtgcgcagat catcgccgat 180  
gagatcagtg atccacactg gatgctgttc ttgtgtatgg attttatgga ggtttgggtt 240  
tttttcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gacggggcta 360  
cccaatagga tcaaagttaa ctttgccggg aagggaatgt cacaccct 409

<210> 6362  
<211> 286  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-060-Q1-E1-B11  
<400> 6362

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ttgtgtgtta tgaataacaa acagattaaa caaaccaga atgacagtgg caagattact 120  
ttaaaaaaaaa aaaaaaaaga aaaaaaaaaa aaaaaaaaaa aaaaaaagga aaaagaagaa 180  
acaaaacaaa aaaaaaaaag cggccgctct aaaggatcaa agcttacgta cccgtgcatg 240  
caacgtcaaa gtcatcgat agtgtcacca aaattcaatt cacaga 286

<210> 6363  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-060-Q1-E1-B6  
<400> 6363

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aggatcagac ggaggagact aacgatgaca ccacggagat taagccggag aacattaagg 120  
acacgactac tgagaagacc actaccaaga ctaatctgct tatcaatgat gataacaata 180  
ataatattca ctacgatgaa catgcacatc gaggaggata tttatgactg acgacatgac 240  
gatggaggat attccgatga tctccctctc cctcctctc tcccctttcg cggccgctct 300

atacgtcca ccttactta cccgtccate cgacttcata cctcttctat attgtcccc 360  
tccttcaactt cactggccgt cctttttc 388

<210> 6364  
<211> 410  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-060-Q1-E1-B7  
  
<400> 6364

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catcgaggga accatggaga acgtcgggga agcgatgtcg cgccatctgg ctcctcttg 120  
cgggtgggaga acgaatactc ctgtggctct ggctggctct gcacctcat gaacggcaca 180  
ccataactga tcgattcggt atcctctggg tgcttgacct togacctgta cgtccccac 240  
ctccgcctga ctatcgctc ggggtgaatct gtctgctcca tcgcccatag gagataactg 300  
atgaactcgg aggactgcaa cgtgactgcc gccgaggagt acatgtacat caccgcctct 360  
catcgccgcc atctcgtctt ttgcataca ttgccacatg gccgcgaccg 410

<210> 6365  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-060-Q1-E1-C10  
  
<400> 6365

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ttttgtgttt tgtctaattg cagggtgatg agacatttgt acaattcaca tatgaagata 120  
aggaagaaag atatgtttat ttgctgtcca aaaagttctc tcatgtcact ttgggcccc 180  
gagaagatag agtccaagtc tctcacgttc tggattcaga ttccggactgc acagacacac 240  
ctgactcaaa atgcacacaa gtttttcata cggactccga attgggtgat ttttttttg 300  
ttggaaacta gatttcgtgc actttccaac ccaattggaa tcaccttcaa attcgtccgg 360  
agcgttgagt tgtggacgaa acaatctgat gctgcagcaa aatccgag 408

<210> 6366



<211> 423  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-060-Q1-E1-C12  
  
 <400> 6366  
  
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 attgataaac cttagggtcat ccacttgacg gaaatttgct attgtcctac agacctctgc 120  
 atttgggggc ccatcaacgt ctacaagatt aacgttgtgt actacacatc aagcaatttc 180  
 tggcaccatt gccggggaag ttagtgcttg aaggtatatc ttacatcgt gcactcgaat 240  
 ctttgagttt cttgttttat caccagttaa gtcaataatt caactataaa atacggcact 300  
 aagggtgcct cttatgcttc atcttttact atcggtcatg aagatcatga ttccaataat 360  
 tgtgccaaag tgttatcaga agactgcatt aacatgtttg gaactaaatc tttgaatgat 420  
 gag 423

<210> 6367  
 <211> 117  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-060-Q1-E1-C2  
  
 <400> 6367  
  
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 tctaggaatc catgccacct gatagctctt cgatacctcc cgtatgtcaa ttcaata 117

<210> 6368  
 <211> 429  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-060-Q1-E1-C6  
  
 <400> 6368  
  
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 gtaatagcta taacataggg tgacacagaa ctagctccag ttcataata taatgtaggc 120  
 atgtattccg aatatagtca tacgtgctta tgaaaaagaa cttgcatgac atgttttgtc 180

ctaccctccc gtggcagcgg ggtcctattg gaaactaagg gatattaagg cctcctttta 240  
 atagagtacc ggaccaaagc attaacactt agtgaatata tgaactcctc aaactacggt 300  
 catcaccgag agtgggtcccg attattgtca attcgggggtt gtcggatcat aacacataat 360  
 aggtaactat agacttgcaa gataggatca agaactcaca tatattcatg aaaacataat 420  
 aagtttaga 429

<210> 6369  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-060-Q1-E1-D1  
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 ctctgagggg gacctgatgc tcaacaactc cgtcttcgcc gacagctgtg gcccacacca 180  
 gaggaagttc gataaggatg acctcatccc gcccaagccg ggatcgtacg tcaccaggct 240  
 cacgcgcttc gccggctgca tgccgtgcaa gccctgcaag ccctgctaaa ccttggtggc 300  
 cccgccggcc ggccggagcc gatcccttcc gaatcttcaa ttctatagct ttgttcaatt 360  
 cttttactca aagattcgtg tatgtattac tacgacatt 399

<210> 6370  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-060-Q1-E1-D10  
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 tgtccatgag ggtcgcactc accagctgaa gctgttctgt gacaaggact accctgagaa 180  
 ggacacatct gttacattcc attcaaaaat caacatgggt tgtgttactc acgagactgg 240  
 ggcggttgac tcaattaagt tcagtttgct aacaaactgg caacogtatt acactatgga 300

acatgtcttg acccagctga tgaacgatat tgcagcgacg cagaaccgca agctagtgc 360  
gcctccagaa gggacattct tctagcgggg tgtttgccgg cccatct 407

<210> 6371  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-060-Q1-E1-D12  
  
<400> 6371

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tcgaaacact gaaataggca aaaaaacagc aatttgggct gggcctccgg ttaatagggt 120  
agtcccaaaa ataataaaa agtgataat aaagccatt aaacatcaa aacagaatat 180  
ataatagcat ggaacaatca aaaattatag atacgttga gacgtatcaa tggtcaccat 240  
cctctcctat ttctgtggc aactgagtct tgatcttga gggttattta tggtggattg 300  
aatattttgg atttgagatc acttgatgca tgtctaattt gtggatatcc gtggtgacat 360  
tgaggtaatc taggtgacaa aagaattgaa cgatatgtat tatatggtat tgctgtagta 420  
cgatt 425

<210> 6372  
<211> 329  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-060-Q1-E1-D6  
  
<400> 6372

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ctggccgtca tgaggaaatt cttttgcac cacttttttt tgactttctc agcaatgccg 180  
ttgtcacac tctgggtgat attacagtgt gacctgtgtg ttaagaaggg atgtttgtcg 240  
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tcaccgcagt ttgccattta caaatcata 329

<210> 6373

<211> 400  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-060-Q1-E1-E11  
  
 <400> 6373  
  
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 atgaatcctt tgagtagcca aagtccgacc ttgctcgaaa accatgtcaa tgctacctcg 180  
 aagcatgttt gtggtactcc gatgatcaat agttacattt gaagcataac gcaaaatgtt 240  
 ctttactaat taccocaaac accgtttgta tgggtaatga catgatattt ctctcacctt 300  
 tcctaaaggg ttttctacgt tataccttgt cgtagagata atgttctgct tgccttggg 360  
 aaggatatac ccctgaaata tgtgtttaaa cacattttcc 400

<210> 6374  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-060-Q1-E1-F8  
  
 <400> 6374  
  
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 gttacttccc aactcaggct ttgaactttg ctttcaagga ttacttcaag aggatgttca 120  
 actttaagaa ggacaaggat ggttactgga agtggttcgg tggcaacctt gcttctggtg 180  
 gtgccgctgg tgcttctcg ctgttctttg tgtactccct tgactatgct aggacaaggc 240  
 tggccaatga cgcaaaggca tccaagggtg gaggtgaaag gcaattcaat ggcttggtg 300  
 atgtctaccg caagactctc aagtcagatg gtattgctgg gctttaccgt ggattcaaca 360  
 tctcctgtgt tggaatcatt gtctaccgtg gtctgtac 398

<210> 6375  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-060-Q1-E1-G11

<400> 6375

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tattttctct acagagtgtg tgtataatct cacaacgga ctgtacaaac agcttctcag 120

cacgaaccac accagtaagc acacaagtc aactgatcat atttatataa aaacactata 180

atcggtgaa aatgacacca tgcattgcag aatcctgggt tttattttat cacttattaa 240

aaacatgtag tactcctagt aacctatgat ttggaccagt ctatggatct caggaggaat 300

ttaattgggt aacaacagaa cataggacca aagaccacca gaaaataatg caaagcgaca 360

ttaacgacag agacagtagt gcatgccta atagtatttt tttttgcatg caaatcagct 420

gggcccc 427

<210> 6376

<211> 393

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-061-Q1-E1-A12

<400> 6376

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aaccgacgc actaccgga gccaaaggtt tacaccaagg tgtttaagga atgccactcc 180

tatgaccaag atgggaattc ctttgagctt tctctggtta cttccaagtg cattggagct 240

tatgtgaaga gcanaaaaac cagaaccaga tatgttggt atgggagaag gtcaagtgca 300

cagaagacaa aggctttcag agattcctgg acaatgtgca gtacaaatcc actggaatcc 360

tgcgttatga gcgcgtgttt gggaaggtt atg 393

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<211> 221

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E5

<400> 6377

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaag aaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa ggggccgcc aaaaggatcc aagcttactt acccgtgcat 180  
 gcaacgtcaa agctcttcaa aattgtcacc aaaattcaat t 221

<210> 6378  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-061-Q1-E1-F1  
 <400> 6378

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 ggacgcctg agatcaggcc tcttgacatg ccaaagcgcc ctgctcgcaa ccgcaggctg 120  
 ccagctctta gggctgcatt ccaggagaca accatctcgc ccgctaattt ggtgctccca 180  
 ttgttcatcc atgaagggga agaggatgct ccaattggcg ctatgcccggt gtgctttagg 240  
 cttggatggc aacatgggct tcttgatgag gtgtataagg cacgtgatgt tgggtgttaac 300  
 agctttgtgc tctttccaaa agttccggat gcattgaagt ctccaacagg agttgaagca 360  
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 atcattgtct acacgg 436

<210> 6379  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-061-Q1-E1-H1  
 <400> 6379

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 tctgcaacat tccccaacag cttaaccccc acatggtcaa cacggatcat gacgcatgtg 240  
 ttgtgtgacc atgatagcta tttccctagc aagctatata tatatatatt ctccactagt 300

tccattcagt atgtggacat gaattgaatc aatgatgcac cctcctgacc actgaagcta 360  
agaataggag cagaagttag agcgagaaag a 391

<210> 6380  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-061-Q1-E1-H2  
  
<400> 6380

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gcgggcaaaa tctttttatt gacagggttt ttgatttggt tgatgaaaag aagaatggag 120  
taatagagtt tgatgagttt attcatgctc tcagtgtctt ccatccatgt tcacctgtgg 180  
aggataagat taattttgca tttaagctgt atgatttgag gcaaaccgga tttattgagc 240  
gtgaagaggt tatgcaaag gttattgcca ttttgaatga atctgatatg aaattgtctg 300  
acgagcttct tgaggccatc atagataagg gacatcacia catcttttcc tagttttgtc 360  
ttcaacacgg cagttgaaga ctaaatagtg caagaattct aaaatgacgg caacaagttg 420  
gaagcatatt atgtctgtca gct 443

<210> 6381  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-061-Q1-E1-H7  
  
<400> 6381

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tggttacatc agaataagga gtaagacaca aggaatcgcg ctgagcttgg gagataagat 180  
taccctcaag cagaagggag gcagtttaatt ctgatgttgc ctgctcacia acaccggatt 240  
gtatgacatg tttccttcaa gagatccact tgccagtgtc atactacagg cacaatggga 300  
ttgattgaat taactacagg aagtttttgt gtacagaata tcaaagagaa gaatgataaa 360  
agaagaggat cgtaggggaag tcagtcttgg gagctgaaaa acgatcttga cacttccttt 420

cgcgataggt gtttattga

439

<210> 6382

<211> 138

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A12

<400> 6382

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ctcttgcggt gattgacttg cattcctgag tctgtgtgct ctgtggtcgg gctagggaga 120

tacccggcgt tcccgtc 138

<210> 6383

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A7

<400> 6383

ggtacaggtc tagaattccc gggccgacgg gacaacaaat ccccatggt tacctgctcg 60

tcctcatgtc tgcataata cctccccatt tttactcaag cagaagcatc ggcttctact 120

agttggaaca gtctaccgca catttaaata tgtgggcaat gaagaaaaag gggaaatatt 180

tctgagagac agtagatgat catcaaaaga atgtgaaatg tataagagaa ttagaggcac 240

cggaagaac tgcacgttg ctatgtagac catgcatcaa gctcaatttt atcattcaca 300

atggactccc ttacctgcc actagtgtca ttctttttt tcggaaaaac ttccaatcta 360

ttcatcttca atcatggcag tacaacgaat gccagaaata aaaattaca 409

<210> 6384

<211> 428

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-062-Q1-E1-B10

<400> 6384

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gttgggtggg gggaagggg agggagagaa aggcgtatcg agagtgtgcg cagtaggcat 180  
agaggcacaa ctacgcactg tgtgtgtatg tgtgtgtgtg tttgaaagag gagtagatag 240  
attactatca agatcgaggt gccaccctac tccttcggtg tcaggtaatg tgtgtgtgtt 300  
tgagagagaa gccatgtcga tagattagta tcaagatcga ggtgtcgccc tactccttcg 360  
gtgttgggaa gtgtgtgtgt gtggttgtgt gtgtcggggg gaagggggca gtgacactta 420  
catatctc 428

<210> 6385  
<211> 291  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-062-Q1-E1-B11  
<400> 6385

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ctctatagat ccatcagctc taagtaaact gcgtataaat catgtatgta taaggatatgt 120  
gttactgatg ttagaagttg attcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa 180  
acaaaagaat ataaaaaaaa aataaacgtg taaacaaaag aatatatctt tacaatcgtg 240  
tctaaaagtc acatcacagt gcgtctcttt aaaaaacatt gagtgtgaaa a 291

<210> 6386  
<211> 343  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-062-Q1-E1-B3  
<400> 6386

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tgggcacttg tgtattggtt tattgctggg cattatgcct tgatattaaa gatttccgcc 120  
cagtacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaggc aaaaaacaa aacaaaaaaa aaaaaaaaaa gcggcgggccc 240  
aaaaggatcc aagcttactt acccttgcag gcaacttaaa agctcttcaa aagtgtcccc 300

aaaatcaaat tcaagggccg tcttttaaaa acttcttaac tgg

343

<210> 6387

<211> 466

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-062-Q1-E1-B4

<400> 6387

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atttcctggt gagttttctg ttgtgaagtt ttcaagtttt gggtaaagat ttgatgcact 180

atggaataag gagtggcaag agcctaagct tggggattcc catggcacc gaagatattc 240

aagagtacac aaaagcctaa gcttggagat gccccggaa ggcattccct ctttcgtctt 300

cgttcattgg taactttact tggagctata tttttattcg ccacatgata tgtgttttgc 360

ttggagcgtc gtgtatgata ttagtatttg atgtttagtt ttccacaatc gtactttctg 420

tacacacctt ttgggagaag acacttgatt gaaatttatt agaata 466

<210> 6388

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-B6

<400> 6388

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aaacaacccg gaagtttttag agagtcattt atttctgttg tctgctttta tatagtttaa 120

aaacaaaaaa ataaggaggg gaacccaaaa ctttttcaaa aagaaaagtg aaagtgagat 180

agacgagcat tgtgaaagtg ggggacgtcc ttgaactttg ttcattgcca tggaaacttt 240

gtgaatctta attacagaaa cttttcaaaa aaaataatta tccccttgta caattccatt 300

gtattataaa aataatgtgc caagggttgc ctttaggatg ttacaatgc ttgttggtt 360

gtgccggtgt a 371

<210> 6389  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-062-Q1-E1-B7  
  
 <400> 6389

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 tgccggatga tgccgcgga aaggctctgag ccaagcaagc agtgatcggc gatgggacag 120  
 aaaagattgt gtcaggacat actactgggt ccagactgtg ttggaatgca acgcatgcac 180  
 cgtgaactgg cggcaggcca ggacgataag atgggcagtg cgccattgct gtacccactt 240  
 tctgcctgat ggtttccttt caagtagcta gtaccagacg tctcccggtg atgttgtatg 300  
 taccgaatta ataaaacaag tttcagatgc ttttagtgag ctctatgtg ggtggcttca 360  
 gcacgcacca naggacaatt ttacatttaa ataaaaaaaa gcggccgctc tacaggatcc 420  
 aagctta 427

<210> 6390  
 <211> 340  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-062-Q1-E1-B8  
  
 <400> 6390

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 atgcccgatc gatttcgccc aggacgacga cctcgccgctc gacgacttca aggaggcgga 180  
 cgatcaacac gatccacgct tacctacgca tccacagcga catgatacct ctgcaaagtt 240  
 gccaccgtgg atcaactcat cggccgctgt cttcacgtgt cggcacagag aatcccccg 300  
 cgtgtgcca cttactcccc tatcatcaca tctcctggc 340

<210> 6391  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-B9

<400> 6391

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tgatctattg atttggtttg gccacctaga ttgatttttc ttagaatgag agaggtgcct 180  
tgtttttaggt tcaatcttgc ggtgtcctca cccaatgaca gaagggtagc gaggcattgca 240  
tttgtattgt tgccattaag gataaaaaga tgggtttttt gcaatattga ttggatctat 300  
ctccctacat catgtcatct tggttaaggc gttactccgt tcttgttaac ttaatacact 360  
agatgcatgc tggatagcgg tcgatgtgtg gagtaatagt agtagatgc 409

<210> 6392

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-C10

<400> 6392

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tatattattt tgagagtctt aaatagcatg gtaattttct tagaatccta atatgcttgg 180  
tatgcaagat taataataaa aatcctctta tgagtgtggt caatactatg ataagtttga 240  
tacttgataa ttgttttgag acatggagat ggtgatatta aagtcattgc agttgagtag 300  
ttgtaatttg agaaataact gtgttgaagc ttgtgattcc cgtagcatgc acgtatggtg 360  
aaccgttatg tgatgaagtc ggagcatgat ttattttattg attgtcttcc ttatgaatgg 420  
cggtcgggga cgagcgatgg tcttttccta caaatctatc ccc 463

<210> 6393

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-D12

<400> 6393

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 gttttgaaaa gagttcattg attttgaaaa acagttcatc gattttgaaa agagtttttc 120  
 aattttgaaa agagttcatc gattccgaaa agagttcatc gattttgaga aacaaagttc 180  
 atcaattttg aaaaagagtt catcgatttg aaaaatagtt cattgatttt gaaaaaagtt 240  
 cgtcgatttt taaaaaagtt catcgatttt gaaaaaaagt tcgtcgattt ggagaaaaaa 300  
 atattttctt tgtaaaagag ttcatcaatt ttgaaaaaat agttcacgaa ttttaaaagg 360  
 ttcattggat tttgataaaa aaaaattcag caaattgaaa gagttcacgt atttaac 417

<210> 6394  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-062-Q1-E1-D6  
  
 <400> 6394

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 taatgagtta gttgcaagat gatgtattac ggaatgagta aagagacttg tcagtaatga 120  
 gattgaacta ggtatgaaga tactgtgaca ccctcgattc aatcatacac taaccataca 180  
 cgcaaagtgt tacgatcaag atcaaggact cacgggaaga tatcacaaca caactctaga 240  
 cacaaaataa aataatacaa gctttatatt acaatccagg ggcctcgagg gctcgaatac 300  
 ataagctcga atacacaaga gtcagcggaa gcaacaatat ctgagtacag acatgagtta 360  
 gacaagtttg ccttaagaag gctagcacia aagcaacaac gatcgaaaag gcaaggcctc 420  
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<210> 6395  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-062-Q1-E1-D7  
  
 <400> 6395

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 gatctccac tgctgaagac accgcaaggc tattggcgat gaacaaagcg cgcgactttt 120

ctggcatgct tggctcaata gattgcatgc attggagttg gaagaattgt ccaaaggcat 180  
ggcatgggca attccacggc caaaaagagg gttccactat aatccttgaa gcggtggccg 240  
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atgttgtcaa ccggtcacca ctgatgaata agattgcaaa cggtgagttt ccaccgggtgc 360  
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caaaatggca aacct 435

<210> 6396  
<211> 447  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-D8

<400> 6396

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ggtaatatcc gattatcagc tcaactcgtca gcgcgcaacg attttgatca tccccctct 180  
tgcaacttgc taccgcatag tatatataga gatactgtac aagacaatat cacaaccgcc 240  
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ttggaggatg ctctattctc tttgttt 447

<210> 6397  
<211> 337  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E12

<400> 6397

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gcgaggcca gggagcggtt gggtaccgga tctgtccggt gggagatggt agctcgggat 240  
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cttttgccag ccggtggtgg cttatgggccc tttagtt 337

<210> 6398  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-062-Q1-E1-F11  
<400> 6398

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gggattccaa gaggaagtg aaccgacgc gctaccggga gccgaggttc tacaccaagg 180  
tgtttaagga atgccactcc tatgaccaag aggggaattc ctttgagctt tctctggtaa 240  
cttccaagtg cattggagct tatgtgaaaa gcaagaagaa ccagaaccag atatgttggc 300  
tgtgggagaa ggtcaagtgc acagaagaca aaggctttca gagattcctg gacaatgtgc 360  
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ccggtggatt cgagaccaca aaggaatttg tggac 455

<210> 6399  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-062-Q1-E1-F6  
<400> 6399

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tcattcacgt ggttagtcat aaaatcctac ataaacttat agatcgctga atatgatatg 180  
tttgattcct tgcaatagtt ttgcgatata aaggtggtta tattagagtc atgctagtgg 240  
gtggttggtg attgtagaga cacttggtgt gaggtttgca agttccgtag catgcacgta 300  
tggtaacctg tgtgtgacaa atttgaagca tggggtgttt ctttgattgt cttccttatg 360

agtggcggtc ggggacaagc gatggtcttt tcctaccaat ctatccccct aggggcatgc 420  
gtagtattac tttgttttga gggctaataa gcttttgc 458

<210> 6400  
<211> 385  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-F7

<400> 6400

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gagttttctc aagagattgt tgtctctcca attgatgcag gtcttgggtg aatattctga 180  
ggctcaaatg gtgatccgag aggacgggca gcaacagaat tccttgttta gagagacaca 240  
ctcagagctg tttagccagc tcaatgatgc tctcttgagg tttgaagagg gtcctccggt 300  
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<210> 6401  
<211> 395  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-F8

<400> 6401

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tccccttcca ttggcttcac caacaagatc tatcacccca atgtcgatga gatgtccggt 180  
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tttgaggtgt tcctgcccc a gtttctctg taccggaacc cctcggaccc cttgaacggc 300  
gaggcggcat cgctgatgat gcgcgacaag aatgcctatg aaaataaagt caaagaatat 360  
tgtgagagat atgccaagcc tgaagacata tcccc 395



<210> 6402  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-G9

<400> 6402

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acctgtggtc actaggatgc attttggctg agcttcttag ttttagagccc atattcccag  300
gccaatctga tattgaccag attggtagaa tcatcggagt cctgggcaat atcacagaag  360
agtcctttcc tggtgttca aatttaccg attacaacaa gatctttttc agcaagggtg  420
agaagcctac gggcctcgaa gcatcacttc ctaaca                                456
  
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<210> 6403  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H11

<400> 6403

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ttttcatgtg ttgtttgctt attctgatgc atttatggct agtatgtagg gtatgaacca  180
tagagaagtt ggaatacagt aggtttaaca ccaatataaa taaataatga gttcattaca  240
gtaccttatg tgggtggttt tctttcttgc accaatggag cttatgagat ttctgttga  300
gttttgtgtt gtaaagtfff caagttttgg gtaaagattt gatggactat ggaataagga  360
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<210> 6404  
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 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H7

<400> 6404

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caaatcggtg ggggtgtttga cgctcttcgt gtcactgatg acctgttgat gaggagggca 180  
tatttttagga agcagcagct tgacaacaaa acaacatcac ctaactctaa ctgaagagga 240  
cagccggtgt gatttgctct tacattgata tcgcatgcgt atgaataatg gtccaatgga 300  
attgggagcg gagtaagaag ctcatgttgc ctttatgcat gtaataatca tgctgcctg 360  
catggccgcg tagctgttgg tccaatgcct ggctgcctgc ctgaactggc gtcaatttcc 420  
agtttgtttt tgtaatatat aataact 447

<210> 6405

<211> 365

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H9

<400> 6405

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caaattgtaa ctgcaagtgt gaattacctc tgctctgttt ctgtgtgttg tactcctcca 120  
aagatcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaacaaaaa aaaaaaaaaa aaaaacaaaa aaaaaagtaa 240  
aaaaaaatca aataaaaaaga aagaagaaaa aaaaatataa gattgaaaaa aaaaaaaaaa 300  
caacgaaaaa aaaaacaaaa tgcaacaaaa aaaaaattta gaaatcaaaa agtaatatta 360  
agaaa 365

<210> 6406

<211> 387

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-063-Q1-E1-A1

<400> 6406

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accactagc atgaatatga gttgtttgac cctgatgtg cctacgcaat catgcgtgta 180  
tgtcatggct gctactgctt agagttgagt cagggtctgat tcatcgagga tgaattggga 240  
aagtggtaaa catgtcctac tgggattgag ctactgtgt aaacactagt tggtagatgt 300  
atccatgaga cgccatgtac gactacatgg agggttgttt cattagcatc atccttaagc 360  
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<210> 6407

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-A10

<400> 6407

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cttcggctgg ctacgaagc ccggtggggg gatgatgatc atggacccat acggcgccac 180  
catcagcgcc acccccgaag cggcgacgcc gttccctcac cgccagggcg ttctcttcaa 240  
catccagtac gtcaactact ggttcgccga ggcagccgcc gccgcgccgc tgcagtggag 300  
caaggacatg tacaatttca tggagccgta cgtgagcaag aaccacaggc aggcgtacgc 360  
caaccacagg gacattgacc tcggcaggaa cgaggtgggtg aacgacatct caacctatag 420  
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<210> 6408

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-A6

<400> 6408

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 caaatcgggtg ggggtgttga cgctcttcgt gtcactgatg acctgttgat gaggagggca 180  
 tatttttagga agcagcagct tgacaacaaa acaacatcac ctaactctaa ctgaagagga 240  
 cagccgggtg gatttgctct tacattgata tcgcatgcgt atgaataatg gtccaatgga 300  
 attgggagcg gagtaagaag ctcatgttgc ctttatgcat gtaataatca tgccctgctg 360  
 catggcccgct tagctgttgg tccaatgcct ggctgcctgc ctgaactggc gtcaatttcc 420  
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<210> 6409

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-B10

<400> 6409

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 ggattccaag aggaaagtga acccgacgca ctaccgggag ccgaggttct gcaccaaggt 180  
 gtttaaggaa tgccactcct atgaccaata ggggaattcc tttgagcttt ctctggtaac 240  
 ttccaagtgc attggagctt atgtgaaaag caagaagaac cagaaccaga tatgttggct 300  
 gtgggagaag gtcaagtgca cagaagacaa atgctttcag atgttcctgg acaatgtgca 360  
 gtacaaatcc actggaatct tgcgttatga gcgcgtgttt ggggaggggt atgttagcac 420  
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<210> 6410

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-B11

<400> 6410

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cctacacggc agagaaacag aggatcttga ggggcctcat caagggcagc ttctttgcgc 180  
 tgatccttgc gtcctggggg ttcccaaggg agaagcgta gctgagttga gttccctccc 240  
 ttctccagta cagcatagca ggattgttca tgttcatgag ggtgatgtgc aggactggtg 300  
 atgtggtgca cttctgcact gtgaagcgcc agtgcgcgag tgtgttcaac aggtgtaaaa 360  
 tatgggacta tcatcggatt tctggatgta atttaatttt acataaataa acctggtttg 420  
 ctacttaaaa aagaaaa 437

<210> 6411  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-B12

<400> 6411  
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 ctgcttgctt atacgactac aaccaggatt tctcgaacct catgcatgag atgctgtcga 180  
 tgatatatac cgtgacgaac gattcgtcgg acacgcttca ggacctggaa acaatgctgc 240  
 atgagataat caaaggcaag gggcgtagct gatccactgc ttctgctagt tctaccgcaa 300  
 ggagtcgtag aagttgcagt ggtccagtga atcgaaatgt accagtattt gtcatgtcgc 360  
 accgtatccg gaaccgtca 379

<210> 6412  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-B2

<400> 6412  
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 cgcaaaatgg agttgacttt catggcgctg cactcggcta tacaggccaa tgtgtatgtc 120  
 aaccttgatt tcatatcttc caatgccact aggacgggca ccatctacta tgtttatggg 180  
 gaaatcacgg cacaccatca actctataac ggtcagagtg ttttgctctt ttctcgcgga 240

gaagagaaca aagcagaggt cattgatggt gaacttcac tggtacggaa gtgtgcagtt 300  
 gttectatatt acttgagacc gtcctgata ctcaagttcg acctgcatgt tccaattaat 360  
 tgtgatcacg atgatggtgg ttgtaccatc gccttcgag actatgttac attttaccgt 420  
 tgacagtatg aagaataaat aatctgc 447

<210> 6413  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-B3  
 <400> 6413

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 tcaactacccc aatccacgtc tactagcata gcatggcata ataagcaaac atagaagtaa 120  
 ctcccaaagg tttgataata acaggtaata ggtactacct catctacttt ccaaaccac 180  
 aatttaatta gatcctaate atgcaatgtg tgaggattga tgtaatgcaa taaaactggg 240  
 tagtaagacg tatgatcaaa gtgttacttg ccttgctgac gatccgtgaa acctaacgat 300  
 tcgaggtagc aagcggcgca ctccgggtac tctatcgcaa acaaacaagc acacaataag 360  
 tactcaacta atgcacaggt aaaactcaaa taagagatct aact 404

<210> 6414  
 <211> 474  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-B6  
 <400> 6414

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 aaaccacacc acctacagag ttctgttgcc caatatcaac aaagctaag catgatcctg 120  
 tgataataac atctggacag acttacgaaa gagaatatat tgagaaatgg ttcagtggag 180  
 gatacaacac ttgtcccaag acacaaaaaa agctagaaaa ctttgcgatg attccaaata 240  
 cttgcatgag ggatctcatt tgcaactggg gcagagagca tggtttcaca atctcagatt 300  
 ttcttccaag caaagattcc tacagttatt tgccagagca attgcatggt cactctatgt 360

caagtttgca caatgtttca gtacctctaa ttgctgggaa tgccaggaat tttgtgattg 420  
atcacagcag ttcattctgtc gcgtttttctg atgccagtta tgtctcagat tcct 474

<210> 6415  
<211> 320  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-063-Q1-E1-B8  
  
<400> 6415

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gagactgcct caagtgccat ctagttgcaa gtgtcacact atgctcgca atgagaattc 120  
gatctatgga gtgctccaca gcaggtcgca attttaggat ctcttcatga ggagaggtag 180  
cttcacaac atcttgaag gcactctcac cgctttcaag accggcagga ctattgcaaa 240  
tgataatgct attgatttct cgagcccatt tgcgtgacgtc attgagcaat tttttggatg 300  
ccacatgaca atcaaaccaa 320

<210> 6416  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-063-Q1-E1-B9  
  
<400> 6416

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cttggggatg cccatggcac cccaagatat tcaaggatag ccaaaagcct aagcttgggg 180  
atgccccagg aaggcatccc ctcttttgtc ttggttcaat ggtaacttta catgcagcta 240  
tatttttatt caccacatga tatgtgttat gcttggagcg tctgttatta tattattctt 300  
tgctttttat tttaccacaa tcctcttgc tgtacacaac ttttgggaga agcctaattg 360  
attaatgttt gctagaacac tctatgtgct tcatatatat cttttgagct tgatactttt 420  
tgctcganta cttcacttat atc 443

<210> 6417  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-063-Q1-E1-C1

<400> 6417

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 tagcatcttc ttccaaatta attttatggt gacataaagt gggactaatg cccttaagat 180  
 catcaagagt atacccaata acaacacggt gcttcttcac agttttcaat aatctctctt 240  
 cctcatgctc taaaagggtta gcactaataa taacatggta tatctttttc tcatcaaaat 300  
 aagcatatct aagagtatca ggcaacggtt taagctcaaa cacgggatca cccttgggtg 360  
 gangaggatc ccctaagggt tcaacaggca aattgtgttt cagaataggt tcctgtttta 420  
 agaatac 427

<210> 6418  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-C10

<400> 6418

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 ctgttcttgt agatttatac atattgttgt atagaaagaa agcaagactc ggaaacgtga 180  
 actaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa ataaaagaag aagaaaacaa taaagaaaca tcaaagcac 300  
 ttcgaataat gtcaacgaaa ttcgaattaa ttgaccgtca tttaaaagat tagctaattg 360  
 gaaaacgctg ccgttacgcg aaacaacgag cggtgcaaca aagcctcctt ttacaagaag 420

<210> 6419  
 <211> 447  
 <212> DNA



<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-063-Q1-E1-C11

<400>      6419

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ctccggcgtg atggaggagg gcggcgggtg attgggcgcg acggcgtatg agacaccgac    180  
gaggacgacg agctgccgtc gttcgacacc cacatgacca tcctcggcca ctgagaggag    240  
ccaagcctga cttctagcgc atggtttagt tatcttcttg catttgcggt gcttgtgtag    300  
ttgtgttgct gccagaaga aacagtctgg caaacataa aagaagaaga agaagaaaac    360  
agaatcagga aagagatgag agagcgagcg tgtcacgatg atccccgcta gctgatgacg    420  
aaatttgccg gttgctcttg tttcttg    447

<210>      6420

<211>      323

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-063-Q1-E1-C12

<400>      6420

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ggacgccgat cgaagtaact agatcttgca cctatcctgc catgcggtct cggcatccac    120  
gattttatat gtgtgtcccc agtgaatttg cgtcaatagg ggaatatctt gctgtctgca    180  
cttcaggaca gatcttgcta acgcccgcta catcgatgac attttcaaag gtcgactatt    240  
gctggctgag ccattcaagg tccgacttcg ggagtcggac atggcaataa tgttcctcat    300  
gctacacaca tccacgctag acg    323

<210>      6421

<211>      446

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-063-Q1-E1-C3

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tagcccaacg gattgactgg aaagaacact actaggaaaa gggctataga tggaattgac 120  
actaatggcg caccagacat gtgggtgcacc attactatat actaatggcg caccatgtgt 180  
tgggtgtcca ttagtgtgca aataactaat ggcgcaccag tccacggtgc gccattagta 240  
atTTTTTTTta atTTTTTcaa aattactaat ggcgccacgt ggacgtgggt cgccattagt 300  
atTTgcacac taatggagca ccaacacatg gtgcgccatt agtatatagt aatgggtgcac 360  
cacatgtctg gtgcgccatt agtgtcaatt ccatctatag cccTTTTcct agtagtgttc 420  
tttccagtca atccgttggg ctattc 446

<210> 6422  
<211> 466  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-063-Q1-E1-C4  
  
<400> 6422

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gccggttatc cgagatgctg atacaatgaa ctttgctgac atcgagaaag ggataaacia 120  
ccttgcaaag aaggctactg agggggcgct gtcaattgac gagatggcgg gaggaacatt 180  
caccatctcc aacggtggtg tctacggaag ccttattagc acgcccata tcaaccccc 240  
acagtcagcg attcttggga tgcactccat cgtgcaacgc cccgtgggtcg tggacggcag 300  
catcctcgcc aggcccatga tgtacctcgc gctgacatac caacacaggc tgatcgacgg 360  
cagagaagcc gtctacttcc tgcgccgcat caaggacgtc gtcgaggacc cccggaggct 420  
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<210> 6423  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-063-Q1-E1-C6  
  
<400> 6423

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gaaagtttac cgctgttgca ataattccct agaaaagtca gaatgtgata aaatgtcgaa 120  
accttttgta tattaagatc tgataaattt actacagtgg gaattttatt tcataatttt 180  
tggagctagg gaagtatgga tgttgcagta ttctttacag actatcctgt ttaggcagat 240  
tgctgttatg tttgcattgt ttgcatatgt ttgcttcttt aatgattcga ttgaggata 300  
ggactattaa atatgcagag gcatttagta tgcaatgttg aataacaatt ttagtgattt 360  
gctacagtag agtatgataa ggtttttgca atagtttata ctaacttata tcacgtgtcc 420  
tggttgagtt ttgtgtggat gaagct 446

<210> 6424  
<211> 89  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-063-Q1-E1-C7  
<400> 6424

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ggaggtccgg atccccaggt tcaacaaag 89

<210> 6425  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-063-Q1-E1-D12  
<400> 6425

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tctacgatgg ctggatgag cagctgctcg agcgcgcgat gatggaggcg agcgtccgct 120  
cggcgggagc cgctgagggc ggcgaggatg ccggggtgga cgtgaaggcg gacgagttca 180  
tcgcaaagtt ctacgcgcag atgaagctgc aacggcaaat ctctgtggctg caatacaacg 240  
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attcatcgat gtcaattgca agttagatac acataatgca taaaccgtag ttgtcacatg 360  
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<210> 6426  
 <211> 337  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D2  
  
 <400> 6426

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atacatgtca cgaatgcatc attgcacatc ccggtacagc gcgggacgca ttcacatagc   180
agcacatgtt gttctaacta gtgcagttgt attcttgagt tgtaaataaa tttaaagtgtg   240
gatgtcatca atgatacagc attgtctcac gtgaagacag aatgatgaat actatgattt   300
ccccacaagt ctggattcaa ctcccgttga tttacaa                               337
  
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<210> 6427  
 <211> 361  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D3  
  
 <400> 6427

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cacaattata gcatgaacaa tagacaatta tcatgaacaa agaaatataa taataaccat   180
ttattattgc ctctagggca tatttccaac atcttcatcc cgcgccttcc acagattgat   240
aaactttagg tcatccactt aagggaaatt tggtactgtg ctacaaaacg aggetcaaca   300
cgagtctaaa aaataagttg tatagtagac atcaagttct cttttggcgt cgtaaccggg   360
g                                                                           361
  
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<210> 6428  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D4  
  
 <400> 6428

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 gcgttagccg atataacgga acgtaaggca gcaaaacaca ggaaccgggc aaaccaaca 180  
 tttgaccaa gacatgattt ggagctgatg catataaggc caaactcgcg acgccgaaca 240  
 ctccctaagg tattcgggtt ttatgaagac aggccgaaac agagcccttg gtaaaaaagc 300  
 ccctgggtgc caggtacgcg caaaattctg gcgtggccac atgccaaaac gccagcctcc 360  
 tcttcggtta tgggaaaaac cgggggatgt tgtcaacaag agacagtaaa aaaggtttat 420  
 gcacggtctt aatctaaaa 439

<210> 6429  
 <211> 349  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D5  
  
 <400> 6429

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 gtttgcggtt tgaaggagga ctgaagttca gagtgatgtg gctgtgaagg ttcagagatg 120  
 ttttttagt atattcagac atgtttttcc tctcttattc ttcatttttt aacttcttca 180  
 taattgatta gataactttt aaggcaacat gttgtgtgtc gaaaagctta gggactcttg 240  
 tgtgtacgtg aaacactttg atcaatagac tcttttagtt agaaaatgat gaaaaaatat 300  
 ttaaaaaaat tcttcagcg aaaatagga gaataaatt ttcattgggc 349

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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D6  
  
 <400> 6430

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 ttgcggctga aaggaggcag gacattcagg ttcaaagt 98

<210> 6431  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D7  
  
 <400> 6431

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 gtcacggaca cccgggttct aaaaagcctg tctcatcata taaggatgat cacaagcaca 120  
 cttttcgtct acaagtttaa ttcactactg agtcactcag caatgtagga cccacttgca 180  
 tgacaaacag agaaagaaaa caatcagttt aggagggaca tgaatcttag atctactcga 240  
 ttctagaaac gatggcaccg caacattaga agcagcaa at ggaccaacac aatcgactac 300  
 accgtgagga gattagcaac accaatgctg gatctgtgat gcatcgagga aagatgggca 360  
 gggaatgaac gaaaaaggta accaaaagga agactcactg tgctttgttc tagaaccttc 420  
 ctactgg 427

<210> 6432  
 <211> 318  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D8  
  
 <400> 6432

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 aaggcgtgaa attgttgggtg aagattgcgg tgatgatgat ggcccccggc ggtgttccgg 120  
 cgccaccgga agcaaagagg agagagcccc cttcttcttc gtcttccctg acctctccc 180  
 tagatgggag aaaggtttcc cctatgattc ttggctccca atggttggga agggcgagag 240  
 cccctccgag attggatcta actctctgtc tctctctgtc cctctccgtt tctgcttccc 300  
 tgattctgcc cttcaacg 318

<210> 6433  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-D9

<400> 6433

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 tacacacctt ttgagagaga ctcacatgat ttgaaattta ttagaatact ctatgtgctt 180  
 cacttatatc ttttgagcta tatagttttt gctctaagtc tttacttata tcttttagag 240  
 cacgggtggtg gttttatttt atagaaataa ttgatctctc attcttcact tatattatct 300  
 tgggagtcct ttagaacaac atggcaattt gcttttaggc ataataaaaa ctttcatata 360  
 agtgcattga atactaagag aagtttgata attgatgatt gttttgagat atggagatag 420  
 tgatattaaa gttgtgctag ttgagtagtt gtgaa 455

<210> 6434

<211> 435

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-063-Q1-E1-E1

<400> 6434

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 atatcctgga acagctcaga atgttggtga tgatcacgac acatttgctg agagatttca 120  
 tgcagatgta atcgatcggc aatgacatca agtcaaagga atgatggagc gaaagggtat 180  
 tggaatcatg ggtacaacac aaactcgaaa tcaagcttgc tgttcaaggc gaaaagtgat 240  
 aagacaagga agatcgatgt aagcttaacg cattgttgga agttgtgctc cggaagaag 300  
 gaccacgtag catagttaaa atttagcatg gtaatgatat agccgatcag gctangaatg 360  
 actataagga ttattaaact cgtaagcaac aaacattacc tagagttata gaatcggagt 420  
 gtggaatcga ttcac 435

<210> 6435

<211> 263

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E5

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 ccgcccgtgg cgtgggtggac ggagccgacg gatccctgga aatgaggcgc ggcacggagc 120  
 gagagactcg gtgggagacg agggatactt cgcgcgggga ataaaagatt actgctcaat 180  
 gcacgggctt ttctgaaatt ttctgaaatg gctgtttta tcgaagcgtt tcctgtcaaa 240  
 ccctcgccgt cgctatgcag cca 263

<210> 6436  
 <211> 460  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-E9

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 ttaaggatat gtgagtacct atttatacta ctctatgagt atctccaaga gatgcacaca 180  
 accgtcgcga tgtgacgtac cagcaagtca aactcaacat aagctaaagt gtggaatact 240  
 gatgatgcaa cacctcctac tgaagaatgt aaagcctcaa tgataacgac atacataaag 300  
 caaccaagta accctcttgt gaattgtata gccagagccc cggctaaacc tgcattcagg 360  
 aataatgtta ttattcaaac aagcaagatt gaagcaagaa tatcctgaac tactactaac 420  
 agaattctat catcattaag gagtatacat ttcaaccttt 460

<210> 6437  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-F1

<400> 6437  
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 ttctggctgg acttcagctc gtgcatgagc cgctgccgcc agccctccga ttgcggcctc 120  
 ctccgcgagg actacctcga gtgcctccac cactccaagg agttccagcg caggaacagg 180



atctacaagg aggagcaacg tcagataaga gctgctgctc gcaaggccaa ggacgaagcc 240  
gaaggagctc ctgctgttgc agctcaccac tagcatccgt ttttatttgc tgcaagtgtc 300  
tccatgttcg gctatgagca aggcaataat ttctaaaca ttctaccctc ccactccatg 360  
acttgttcca aaatcatgag ttcgataaac aaccttggtc aacaagtttg tgcattgttg 420  
agatattaag cgataataaa cgcttgattc aaccatgaaa catgat 466

<210> 6438

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-F11

<400> 6438

aggtaacggt caggaattcc cgggtcgacg ggtatccacc gtggcgaact tgtagtcagt 60  
gctgttgaca aaccagttga aacggtcgca aggtctgtg gccatgcagt actggtagat 120  
gaggacatga tggcgacgc acaattgagc gacggcaacc ttctaatacta tgccgggacg 180  
accggcggtg tactgaaggt cgatgccgac caccttgtag ttgtctccag caagcaactg 240  
ctcaatgcgg ttgatgtagt catccacat gcccgagtcg atggtgtata gaaaaaatga 300  
aaatgttttt gaaaacaaag gataaaataa aaacgaaaaa ggataaataa aaggaaagaa 360  
atagaagcag aaacagaaaa aagcacaaca aaaaagaaaa aggaaaacgg agaaaaccag 420  
aaaaccggca aaaggaaaaa aattaaaaa 449

<210> 6439

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-F3

<400> 6439

ggtcaagaat acccggtcg acgggaaggt gaaggctgtg ctgatcgctg cgctctactc 60  
gggctactac gacaagatcc ggggcatgta ctacgagaac ccggccaaga cgggggagat 120  
cgtggcggtg taccagccga gccacgagga gaagcaggag tacgcgtcca acgagcacia 180  
ccagaaggcg ctggcggaga tctacctgct cagctactgc gacaagatcg ccatgagcgc 240

ctgggtccacc ttcggttatg tcgctacgg cttcgccggc gtcaagccct ggatcctgct 300  
 ccggccggac tggaacaagg aagtgtccga cgtcgctgc gtccgggtcca cgtccgtcga 360  
 gccgtgcctg cactcgccgc cgatactcgg gtgcccggcc aagaaggagg tggacgtggc 420  
 ccgctgcaag ccctacgtcc gacactg 447

<210> 6440  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-F6  
 <400> 6440

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 tgacaccaca caacagatat gctgctgtca gcagtcctct ctaaataagac actgcaatta 120  
 tcgtataagt acatcattgc tgctgtcagc agtgcctctt aaatagacac tgcaattatc 180  
 atgtacatca ttgctgctgc aatgaacat taagagatta tttaaaatcg agcctaccat 240  
 ctgctgtgtc gtcaacagag gggtgaggcg gagttacaaa atctgtatga gaaaccgagg 300  
 gattgtccga gtcagcgaca tctttgttat cttcagagct gtcagaagca gctgagatgg 360  
 cgtcacctga ttctgaatgt gttctgtcca catatgcttc aggtaaggag ctctcggcca 420  
 cgtcagcat 429

<210> 6441  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-F7  
 <400> 6441

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 gagacttggc tcttgaatga tcgttctttt ttctctctct acccgcgcca ccttgcgtgca 120  
 caggagggat tgctaacaca taatactgcg ctgcacctct gaaggaaaat tagtagccac 180  
 catgaacgag gatcatgccc ggctcggtaca tttctttgat gcatcttgtt tgttcacctt 240  
 gctgtataga aagatgagag atcagtgatc ggaaccgatg cattctgagt tagagattat 300

ctgttcttcc gtacaggggtt caaatatcag ttccgtacc accatggcga ttactatctg 360

acatggagtc agcttttcgc aaga 384

<210> 6442

<211> 365

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-G10

<400> 6442

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ttagtcacaa gaacgtcaca cacctgttgc gtaacacgat aatttatcac tacacattct 120

tagacggatc ctctacgcg catgcactca gtgttctactg aaatctatct ctatgaacta 180

ttgctcgaac tgtggtcaag aaatatgttg aactcgctcc atcttcatca gacatctgta 240

cactatacga tcctgtctcg atagttgcag tcatcatgcc acgtatatcc tcagtctcat 300

gacttctcta ctgcctgtac tcatatactg tcatcatcat atctcaattt ctctctctcc 360

gttcg 365

<210> 6443

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-G11

<400> 6443

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cgttgctcat gcactagagg atacggtcac ggagcacacc atccgcgtaa cacgctccac 120

actaaagagg cgtgctacca cagatgctgg agcgtgaaac cccactgcaa accaatgttt 180

tactgcctca agtaatcgtc gctctcacgt gctgagtcac tctcacattg tcccgtagtc 240

atatgtcgag tgcattcggt agtaaccggt atcaatagtt gaactcctca ttcacgcgag 300

cgctctctct aaaggattca atcctacatg cacgtacaca cgtcgtccta gctatacgaa 360

attctctctc 370

<210> 6444

<211> 447  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-063-Q1-E1-G12  
  
 <400> 6444

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 cagatacaag aagttaaagg aaatgagcgc agaagagagg aagaaggta caccacgcac 120  
 tgtcacggta ggagggaaag catttgcaac atacaccaat gctaaaagaa tagtgaaatt 180  
 ggtaaattgat gttgggtgctg tggatgaaca tgatgctgac gtcaaccaat atctgaaggt 240  
 ggtgttcatt ccaaactaca acgtatcaat ggctgaagtg ctcatctctg gcagtgaact 300  
 gtcacagcac atcagtactg catgcatgga agcaagtgga acaagtaaca tgaagttctc 360  
 tctgaatggc tgtgttatca ttggaactct cgatggagcc aatgttgaaa tcagagaaga 420  
 attanggcaa gacaacttct tcctttt 447

<210> 6445  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-063-Q1-E1-G3  
  
 <400> 6445

ggtccagaat taccgggtcg acgggggagg catgttggg catcgttttc cacggaggct 60  
 ggggagacta tccgcgcaac cctgtttccc ggtgatggca tcgggcctga gatcgccgag 120  
 tcggtaagc acgtattcaa tgttgcaggt gtaccgatag aatgggaaga acattatgtt 180  
 ggtacggaag ttgatccag aacagagagc tttttgacat gggagagcct ggagtctgtg 240  
 cgtagaaaca aagttggctt gaaaggctct atggctacac ctattggaaa aggccaccgt 300  
 tctttgaatc ctacattaag gaaagaactt ggactctacg ccaatgtcag accttgcaac 360  
 agcctcccag gctacaagac tagatatgat gatgtgaacc ttgtgacaat ccgtgaaaat 420  
 actgaatgag agtatactgg cct 443

<210> 6446  
 <211> 437

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-063-Q1-E1-G4

<400> 6446

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aagggtgatg actcaacata aaagtaaata gataggccct tcgtacaggg aagcagggat 120
ttgtagaggg gccagagctc gatttttaaaa tagagatgga ataacatttt gagcggcata 180
cttttgctgt caacgcaaca actatgatat ggctgtatct tccatactac atgcattata 240
cgcagttccc aaacagaatg gtaaagggtt atactcccc aaccaccaac aagcatcaat 300
ccatggcttg ctgaaacaa cgagtgcctc caactaacia caggcctgng ggagttttgt 360
ttaattatgt tgatttgctt tgatcttttt ggatcaaagg actgggcatc ccggttaccg 420
gccctttctt gtgaatg 437
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<210> 6447  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-063-Q1-E1-G6

<400> 6447

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acccggagat gatcctggcg gcgaccaaca acggcgacat cgtggacgcc taagcaaagc 120
aatgaaccac ggacaccaag gcgtacgtac gctggtgttt cggggcgaaa aatcaataag 180
atggttcggt gaaacagagg atgcttaggg acgaggtctt gtctttgtga tttgtcagac 240
tcgtgtttta ttccgatgtt tatctttagt tttcttgtgt tagcgtatgt tgttcatgcc 300
acctgcccgc catgtgctct gctctgctct gcctcacggc agctccatgg atgatgaatc 360
cttatggaac aagaggaggg aataaaaagg ttgagttcta tgtaaaaaaa aaaaaaaaaac 420
aacaaaacaa aaaaacaaaa aaaaggaaaa a 451
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<210> 6448  
 <211> 199  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-063-Q1-E1-H1

<400>       6448

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tgacgtcatc gtcaccgcaa acatttgacc ccacatcagt ataaggtaca tttgactacg   120
ggagtcgacg gaacactgac actaactaca ggttgggtcaa aggttcaaag aaattctcct   180
ttaaattagg ccaatgcta                                     199
```

<210>       6449

<211>       473

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-063-Q1-E1-H5

<400>       6449

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atcaaacttg ttatgataat tggacgggct agaatcagat gctttgcccc aagagaaatc   120
ttccagagct tgaatgggtgt ctcgaactgg tgggataaag ctcttgtgtg ctaccttggc   180
cagataggta gtcttcagag aatgatcaat gacttggttg atccaaggag caaagaattt   240
caggcacatt gggatgatgcg cagaatcctt cagaatgcgg aggaataagt cttcgacatc   300
gaagacaaat cgatgagaaa tagcatatat tgtgttccga agaacatccg agattgatcc   360
atcagtattc ataccgtcca gaggacaaat agtatatgtg agcagatgat aaatgggttg   420
attctcgaag gtcaaatget taagcatcgg agggccatca taatccttaa tct          473
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<210>       6450

<211>       407

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-063-Q1-E1-H6

<400>       6450

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ttcccgggtc gacgggttcc gtttattatg acacgtcca tcattgtcat attgctttgc    60
atgatcatgt agttgacatc gtatttgtgg caacgccacc gttcataatt ctttcataca   120
```

tgtcactctt gattcattgc atatcccgg acaccgccgg aggcattcat atagagtcac 180  
 attttgttct aagtatcgag ttgtaatagt tgagttgtaa gaaaatagaa gtgtgatgat 240  
 cttcattttt agagcattgt cccaagtgag gaaaaggatg atgggggacta tgattcccc 300  
 acaagtcggg ataggactcc gaacgaaaaa tcaagaggcc atacatcaga agagaagaaa 360  
 atgccaaga caaatagtat atgtgagcaa aaaaaagcgg ccgctct 407

<210> 6451  
 <211> 367  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-H7

<400> 6451

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 cttgtgttga cagatatgac tatctactgc ctgtagccta cctgggatac catcatatgt 180  
 tgctgaatat ggtactactt ttatcctgct taagttctgt attttgcct agttgaaaaa 240  
 caagcatagt aatgaatctt cttttttaa acattgtccc aggtgaacaa gacgatgata 300  
 gcgactatca ttctcccaga gactccatat atgactctta gtgatcacat aaagaggcca 360  
 tacaaga 367

<210> 6452  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-H8

<400> 6452

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 aggacggcga gcacaaggag ggcatgatgg agaagatcaa ggacaagatc agcggcgacg 120  
 gccacggcga cggcaagaag gacggcgacc acaaggagaa gaaggacaag aagaagaagg 180  
 acaagaagca cggcgagggc cacaaggacg acgacggcca cggcagcagc agcagcgaca 240  
 gcgacagcga ctgagccagc tccggccgag ctccggcagc agcgtgcagt gtaggcgaga 300

tcgatgaacg cttgggagaa gtgtggcata catatatgtt gcagggtttg gagcgtgtgg 360  
taccatatgt atgtaatgcg tgacatgtct caatggatct gtgatgtata ataattagcc 420  
ggctgcactg cactgcac 438

<210> 6453  
<211> 322  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-063-Q1-E1-H9  
  
<400> 6453

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gctctcacca taacacgacg gtcacttggga tccttctcca cagaggtgct taatcatgct 120  
cgtocattgc agaggcggag ggcacgcac agggctaact taatgtctgt tatggtatct 180  
aaggtgccac ctgatgcgaa catggcagac caaggtggtg aaacaggaca tgattcggag 240  
ccgatgcata tagtactatc tattcgggtgt gacccaactg tgacagtgtt ccgacttaac 300  
agaccatact ttgtggtacc ta 322

<210> 6454  
<211> 365  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E1-A10  
  
<400> 6454

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ttgttgatc acgacctgaa tgaaataaac gaaataatgc tcttgttcaa acatcaaaaa 120  
aaaaaaaaa aaaaaacaaa caaaaaaaaaa aaaaaaaaaa gaaaaaaaaa aactaaaaa 180  
aaaaaaaaa accaaggaaa acaaattatt aaaaaaatca aaaaaaaaag gccctccaaa 240  
acaatcaaat ctaacttacc cttcccttca acgcaaaatc cctcccatc taaaccctaa 300  
ctaaaattaa aggcccggcc tttaaaagta cccgcacggg aaaaacacaa cctttaccca 360  
accaa 365

<210> 6455



<211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E1-C10  
 <400> 6455

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 tgtagccggc gtgatgacga cgaagatgac caccgtcggg aggaccaaga ccgagatcgt 180  
 cggggccgtg acggctccag gaacggcagg ggctgggggg agaggggtgcg tcgcagcctc 240  
 tcccgcgccc cccgggacga caaccgcgac cgtggctcgag agcagcaagg aggtcgtgat 300  
 ggcggtcggc gatgccatga ggaagtggcc ctttcgctgc tgctacgtgg ctccggctcc 360  
 tccagcgtgg tggccgcaca cgatgccgag atggtgccag ttgctcctcc gccgcctggc 420  
 cgtacaatct cccc 434

<210> 6456  
 <211> 148  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E1-C11  
 <400> 6456

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 gatttttgca gtgggatttg tagggtaacca tgctgcgctg tgtttgggag ttgacatcgg 120  
 tccatgggat atgtgccacg ctcttaaa 148

<210> 6457  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E1-C9  
 <400> 6457

ttcccgggtc caccgggacg tccgtgaacc ggtgctccag ctgccggaag cgcgtggggc 60  
 tgacgggggc ccggtgccgg tgcggcgaca tgttctgcgg cgagcaccgg tactcggacc 120

ggcacgggtg cagctacgac tacaaggccg ccgccaggga cgccatcgcc agggacaacc 180  
 ccgtcgtgcg cgccgccaag atcgtcaggt tctgaagctg aaaccaaggg gaaagaagaa 240  
 ttcagaattc cagccgaggc aaagcaaaga atcatctcat cgaggcagtg ggccgccgtg 300  
 cgagccgcta gtattatgct gttgttctcc ggagtgttcc cttttttaat taaaaaatc 360  
 tttatttatt ggaaggaaaa aaatgggagg taaagatgtg gatg 404

<210> 6458  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E1-D12

<400> 6458

ctgcagttcg gtcgacaatc cgggtcaacg ggctgggacg aaaaggcacg ctaagagggc 60  
 atcaaataat atgtatggac gggcattctc tctactgaagc aactacaca gttctacaga 120  
 attccgcctt ggtgggtccg tatatggacg aacacaagaa ttttctacag tccaaacacc 180  
 cggagaattc tgacgactag attacacgtg aacaaacgag gacttttgcc ggttggttgc 240  
 agaaacatgc cctgaatgat ggtgatattc aaaatgacct atactcgctg tcccagttac 300  
 catcttcgaa tataatgact ttcaaagggt accagataaa tgggaataca ttttacacga 360  
 tcgccaaga taagaagagc agcaagcaaa acagtgggtg ctgcttcgat gcaacaacca 420  
 acacgggaaa ggaagcataa taggggtaca t 451

<210> 6459  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E1-H12

<400> 6459

gtcccggttc aacgggtcgg tgcattctcat gatctggaac tgcaccatcc ccggaaagca 60  
 cgggactgat tgggaaagtg gatactaccc acttactctc cacttactg aggactaccc 120  
 tagcaaacct cccaagtgc agttcccgca tggttttttc caccctaatg tctatccttc 180  
 agggacagtc tgcctctcga ttcttaatga ggatagtggg tggagacctg ccatcactgt 240

taaccacatt ccagttggaa tacacgagtt gcctgatcaa actaatccag ctgatgctgc 300  
 ctagactgat ggttatcagc tcgttatcca cgatccagca gagtacaaga gaagcattcg 360  
 gatgcaggcc aagcactagc ctgcctctgg t 391

<210> 6460  
 <211> 195  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-A10  
 <400> 6460

cgggctcgacg ggaggttcac gggagagaag cgacggagtt agaagttgta aatatgcatt 60  
 gttgtatcgc gacctgaatg aaataaacga aataatgctc ttgttcaaac gtcaaaaaaa 120  
 aaaaaagaag taaagaaaaa taaatggaaa agatatatta atgtaaatga aatgaaaaat 180  
 aaaatgtatc caagg 195

<210> 6461  
 <211> 358  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-A11  
 <400> 6461

aacgtggatg tggacgagtc ggatagaaag ctcttagatg atgaaaagaa acccgatatc 60  
 acgaaacgac cacacactcc tattggagat gaggtggaat gcaagaagcc aaagatagca 120  
 gaaggctcaa ggtgccaaagg agaagaacct gaggctggag ggataaagaa ttcctcctgg 180  
 gtctgatgac aggggaatgc agtaaacacc agaagcatca aaactatgat ctggaacagt 240  
 atcctgaata aactattttc tggattatga atgaattctg aagcatgggg ctataagtga 300  
 attatgtaac atggatttgt aactatgggtg gatgttaagt taacgttcta tcagtgcc 358

<210> 6462  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-A3

<400> 6462

gggtcgacgg gtgtgatgtg cttaagatgc agatcctcaa caggaaccct acgacagatg 60  
gtattgcagt taagaggaaa ctcaatgctg atggatccta ctataaacct gagtagtatc 120  
ccaaaacctc atgggttact gcaaaaggac ctcccgtaga tccatcgact ttatctgggt 180  
ttacatgtga atcctcatat tcatctgatg agtcatctac tctaactaga aattgttcaa 240  
aaataatcat ggtgaggtat ttgccagata tgttggaact aattgcagga acggctctcc 300  
tatgaagaaa atctgggttc caaaatatg ccttgaaagt cttcaggtga atgtcctcat 360  
gacaccacct gtgaagaata ggaacccac atcaaa 396

<210> 6463

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-B11

<400> 6463

ggtcgaaata cccgggtcga cggggaccac aaggagaaga aggacaagaa gaagaagaag 60  
gacaagaagc acggcgaggg ccacaaggac gacgacggcc acggcagcag cagcagcgac 120  
agcgacagcg actgagccag ctccggccgc gtcocggcag cagcgtgcag tgtaggcgag 180  
atcgatgaac gcttgggaga agtgtggcat acatatatgt tgcagggttt ggagcgtgtg 240  
gtagcatatg tatgtaatgc gtgacatgtc tcatggatct tgtgatgtat aataattagc 300  
cggctgcact gcactgcacg gtgcttgtaa taataacggt aatgaatcat gttggtattg 360  
atac 364

<210> 6464

<211> 445

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-001-Q1-E2-B2

<400> 6464

cggtcgagna ttccgggtcg acgggaacat ctctccac tgaaagcgca tcgccggaaa 60  
tcctgaaata aatccaggaa taatgcgagc accaggattt gaaccctggt gggttgggga 120

taccactgtc cacctaacca actcaaccac aggttgattc gcaatgacta catgtattaa 180  
cgaattacta catgctcatt ataattgctc ttttacgatg ctaagatggg tagttatgat 240  
caattagtgg tttgagggct aggcgtcgag gtaacttggt actattggct ttttttttga 300  
ggaatgtggg cctgtcgaag cggtggactc tgggtgttacg ttagaatttt cacagatgag 360  
cgcaatgcac aaaaaaagga aaccaaagac ttcccaaatac tggcagcatt ccccaccatc 420  
tccttcctct agaacattct gtctc 445

<210> 6465  
<211> 304  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-001-Q1-E2-B3  
<400> 6465

atttaaacad gtccatggat tcatgtctgt acaaagtgtt taactgatga ttacatccca 60  
aagtagatgc acagtcagga ggcgatttaa gtttttataa aataccatt gttcatgctc 120  
caagtgtacg ctaagatgac caactatggg cagtcagtcg tttgagggcc tagcctccag 180  
gtgcattgta cctcaacatc aattatggca cagatattca ccttcctctt caagattgat 240  
ccagatgaga cgcaacgatc tgtataccat ctcgatgagc aatttctgaa ggttgtaa 300  
attt 304

<210> 6466  
<211> 186  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-001-Q1-E2-C11  
<400> 6466

cgggctgacg ggcaatggag gatgtaggtg tgatatgtca agtagtggac agataagcca 60  
accactggat gtggttttca gggatttttg cagtgggatt tgtaggggtac tatgctgctc 120  
tgtgtttggg atttgaaata aaacgatggg agatgtgcca cgctcttaaa aaaaaacagg 180  
agaggg 186



ggggtcccg ggcgggtgcg gcgacatgtt ctgcggcgag caccggtact cggaccggca 120  
 cgggtgcagc tacgactaca aggccgccgc cagggacgcc atcgccaggg acaaccccg 180  
 cgtgcgcgcc gccaaagatcg tcaggttctg aagctgaaac caaggggaaa gaagaattca 240  
 gaattccagc cgaggcaaag caaagaatca tctcatcgag gcagtgggcc gccgtgagag 300  
 ccgctagtat tatgctgttg ttctccggag tgtttccctt ttttaattaan aaaatcttta 360  
 tttattggaa ggaaaaaaat gggaagtaaa gatgtggatg aaaaa 405

<210> 6470  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-D1

<400> 6470

cgggtccgaga atcccgggtc gacggggcgc ctgtcctaca actatgacaa taccctgact 60  
 ctcaaggggc gcttcaactc ggatcttcat gtgggcggga tgatacagtt tgaagaaagg 120  
 ttggctagta ttgtgttgcg ggcaacaggt gatgttgatc ttcgtgctat gggtcagcag 180  
 ccccgggtcg ggttccaagt ggtgtttgac ccgacctgga agtaagtagc ctttgccctt 240  
 gcagtgttgg tgcttgcttt gcttttgctt gggaggaact tttttggtaa aacggaaggt 300  
 cttgattttg ggttgtccat gatgattgat gtatggactg aagctttaga cttgtcaatt 360  
 cgactatgtt ggttttgcgg aagcttgatt gtcctctcat ac 402

<210> 6471  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E2-D12

<400> 6471

gcacggtcga gtatcncggg tcgacgggct ggaaggaaaa ggcacgctag gagggcatca 60  
 aataatatgt atggacgggc attctctcac tgaagcacac tacacagttc tacagaattc 120  
 cgccttggtg gctccgtata tggaggaaca caagaatttt ctacagtcca aacacccgga 180  
 gaattctgac gactagatta cacgtgaaca aacgaggact tttgcógggt ggttgcagaa 240

acatgccctg aatgatggtg atattcaaaa tgacctatac tcgctgtcnc agttaccatc 300  
 ttcgaatata atgactttca aagggtacca gataaatggg aatacatttt acacgatcgc 360  
 ccaagataag aagagcacca accaaaacag tgggtgtctgc ttcgatgcaa caaccaaacac 420  
 gggaaaggaa acatat 436

<210> 6472  
 <211> 157  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-D2  
 <400> 6472

acgggtccgac tattccgggt cgaccggaag atcgactaa ctgagctgac agacgctcac 60  
 tcgaaacggg ggtctcaacc cgcatgataa gttcagcgca atacgacaga tatcaaaacc 120  
 gatggctact gctgcattga ggtcaacaag tgaagtt 157

<210> 6473  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-E10  
 <400> 6473

cgggtccacg ggggttaatca taagtaggag gtttgttcaa gtaagaacag tacctaagca 60  
 ccgggtccacc cacatatcaa attatcaaag tagcgaacac aaatcaaadc aacatgatga 120  
 aagtgactgg atgaaattcc cgtgtaccct caagaacgct ttgcttattg taagagatcg 180  
 ttttggcctg tcccttgccct caaaaggatt gggctacctt gctgcacctt tggtactatt 240  
 accattactt gctcgttaca aaatatcctg ctatcaaact actatgttac ctacaatttc 300  
 agcacttgca tacattacct tgctgaaaac cacttgatcat taccttttgc tcctcattgg 360  
 gttcgacact cttacttata ctagaagagc tacaattgat cccaatactt gtgggtca 418

<210> 6474  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-001-Q1-E2-E2

<400> 6474

cggggtcgac gggaggggtt gttttcttct ctaagtcctt tttcctcata acatatgccc 60  
ttgttcaccg catcgtaact ttgcaccgt agctccgttt tgggcgtgta gcatatcaaa 120  
ttgttcacat ggatatgcac ttcatttcat tccattgtac catattcatt tgagggtcatc 180  
ttgatgccct aaatgctgtt gcaagagtgc tatgtaatgt tagtttcaga ttcttaccag 240  
attatcgaca ttgtcattt ttgccatgtt taatgatgag gacatgacta ccttggatat 300  
gaccaaaaat attgcatata tgcataattg tcagggtgatt tctagtgcaa actattcaat 360  
aatctattta tgttatccag aacaaaaata cttcacacac ttttgtgttt tg 412

<210> 6475

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-E3

<400> 6475

cggtcgagat attccgggtc gacgggtact tgaatattgt tatgataatt atgcttctaa 60  
tgccatatgtt aaaccatata ttgagaaatt caacgctgac gaagaagaga ctaatatttt 120  
gcaggacgct atggaagaag aaattgatga aactgtgagc tcattggatg aaagagatga 180  
tgaggagagc gaagaacaaa ggaggaagag cggattagct acccgtgtcc accttctaata 240  
gagagtaacc ctccaactca tacattattt aattcccctt cgttcttacc gaaggatgat 300  
tgctatgatg attgctatga tcccttgaat ttgtttgaaa tatccctttt tgatgatgct 360  
ttctatgctt gtggccaaga tgccaatata aattatgctt atggacatga acttgctaga 420  
gtccttatgt taaacatgaa attg 444

<210> 6476

<211> 438

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-001-Q1-E2-E4



<210> 6479  
 <211> 211  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-E9

<400> 6479

tcgagggcaa ggggactggc atggatgcat cctgtgtgga tgcattcagc caaccaactt 60  
 cctacggata atggtttgtt accattccca agaattgcta ctttttcttc gcatgttggg 120  
 tagtttgctg tatcatgacg cagcttgta cctagacacg cttctctggc atatattagc 180  
 tcggtgattc aataagaacg tctcgtttcc g 211

<210> 6480  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-F1

<400> 6480

atcctgccgc acggtcgagt attccgggtc gacggggagt gcgacgaagg tgccatggcc 60  
 gccatagccc agtctgcgcc ggattctgtg ctgatgacat tggcggagtt tgagacggca 120  
 agagaggcgt ggaatgcact caaagagatg aggattgaat aaaatcgtgt cacgaaggct 180  
 cgggcacaag tgctgaagcg ccaatttcac aagttgcaga tggagaaaac tgaatcgggtg 240  
 aacgactatg ccatgcgtct gactactttg gtgggagaga tccacgcgct tggtgcaaag 300  
 ctgcacgaga ccgagattgt ggagaagttt ttcagttcgg tgactgataa attcacgtac 360  
 atcatcggca cgctcgagca gctttacgac atcgacgaca tgaccataac 410

<210> 6481  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-F10

<400> 6481

cgggtccacg ggaggggttg atttcttctc taagtccttt ttcctcataa catatgccct 60

tggtcaccgc atcgtaactt tgcacccgta gtcctgtttt gggcgtgtag catatcaaatt 120  
 tggtcatctg gatatgcaact tcatttcatt ccattgtacc atattcattt gaggtcatct 180  
 tgatgcccta aatgctgttg caagagtgtt atgtaatgtt agtttcagat tottaccaga 240  
 ttatcgacat ttgtcatttt tgccatgttt aatgatgagg acatgactac cttggatatg 300  
 accaaaaata ttgcatatat gcatatttgt cagggtgattt ctagtgcaaa ctattcaata 360  
 atctatttat gttatccaga acaaaaatac ttcacacact tttgtgtttt gt 412

<210> 6482  
 <211> 229  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-F11

<400> 6482  
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 tgtgcatttc atcgtaacgt tatgggcatc taaccgtgat gggcgtgtag catacatatg 120  
 agtcaactg gagatgcaca tcacttcgat ccattgtacc agattcatga gatgtcaacg 180  
 ggcatgcca gatgctgctc aactagtgtc ctggagcatg atcttcata 229

<210> 6483  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-F3

<400> 6483  
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 tcaatggcag gccacgcaca accggtcgta cctgagcgcg gaggagaggg tgcgtcgctt 120  
 ccgggtgtac cgcgacaacg tggagtacat cgacgccacc aaccggcgcg gcgacctcac 180  
 ctacgagctc ggcgagaatg agttcgccga cctcaccag gaggagttcc tagccaggta 240  
 cgcgtcgctc tacgatgggg tcggtgatga tactggcatc acgttgcttg tggggcggtg 300  
 cgacgccgag ctgtggctgt ccggggcgga caatgatagc tccttgagg ctccgcctcc 360  
 cagctgggac tggagatcca agggcgccgt cacaccggtc aagtcccaag gcgcaggatg 420

cgctagctgc tgggcgttcg tga

443

<210> 6484

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-001-Q1-E2-F4

<400> 6484

gggtcgaccg gaggcggtca cgtacaaaa agcgcgacga cgacgacgat gatgagagga 60

agccgcggta caagaagcac gacgacgacg atgatgacca cgagaggagg ccgcggtaca 120

agaaacgtga cgacgacgac gatgatgacg atgacagaaa gccacgttac aagaagcgct 180

acgacgacga cgacgatgat gataggaagc cacgttacaa gaagcacgat gatgatgatg 240

acgacgacga tgataggaag cagcgtcgcg ggaacaaccg ccgccgccac gatgacgatg 300

actgattatg acatgagttt aagctgacgc taataagcat agttgcggcg gctttgcatc 360

gatgaattac gacatttcac tttttttc 388

<210> 6485

<211> 432

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-001-Q1-E2-F9

<400> 6485

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tgacgaaatt gatgaaactg tgagctcatt ggatgaaaga gatgatgagg agagcgaaga 180

acattggatg aagagcggat tagctacccg tgtcgacctt ctagtgagag taaccctcca 240

tctcatacat tatataattc gccttcgttc ttaccgaacg atgattgcta tgattattgc 300

tatgatcnct tgaatttggt tgaatatcc ctttttgatg atgctttcaa tgcttggtggc 360

caagatgcc aataaatta tgcttatgga catgaacttg ctttagtcct tatgttagac 420

atgaaattgt tg 432

<210> 6486  
 <211> 293  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-001-Q1-E2-G10  
  
 <400> 6486  
  
 ccgggtccac ggggtctaca gcaacggcgg tgttggtctc ccacacaagg agatcaagtc 60  
 aagcatcctg aagcctgaga tcgtcatgtg agtcaccgc tcacaaatgc ttttaggaac 120  
 gatgttgtgt ggcgtctttg ttctagtgc tactgtaaag agcttaatat atgtggaact 180  
 tgcgagactt gttaaactga tgagagtgtg tgtgcaaat gaaaaagaag ttagtaaact 240  
 caataacaag caagtaaagg tagagattgc ctcacacaaa taagacatca agg 293

<210> 6487  
 <211> 375  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-001-Q1-E2-G11  
  
 <400> 6487  
  
 ccgggtccac gggacgtata gtattctgag agtcctaaac aacatggtaa tttgctttgg 60  
 ttatgaattt aatcctaata tgatgggcat ccaacaggga tatacttgta actttcatat 120  
 gaagtgcact gaatactaag ataagtttga tacatgataa ttgttttgag atatgaagat 180  
 ggtcagtggc agagccaact caagtttata gccggggcat gatctacatg ctgccaaatt 240  
 acttactttc tacccaaaca aacgtccact tcaccaatt ttcttacta aagcttcatg 300  
 gacttgacc aaggagccc gggcatgtgc tccagcgtca cacgtgctgt caacggcact 360  
 gaagatggtg atatt 375

<210> 6488  
 <211> 383  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E2-G12  
  
 <400> 6488

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 tatgaattta gtcctaatat gatgggcac ccaagaggat ataataaaaa ctttcatatg 120  
 aagtgcattg aataactaaga gaagtttgat acttgataat tgTTTTgaga tatgaagatg 180  
 gtcagtggcg gagccaactc aagtttagag cgggggcaag atctaagtgc tgccaaatta 240  
 cttagtttct acccaaaca acttccactt cacccaattt tctctactag agcttcatgg 300  
 acttgcacca agggagcccg ggcaagtgcc ccagctcgcc aggtgctgtc aacgccactg 360  
 aagatggtga tattaaagtt gtg 383

<210> 6489  
 <211> 376  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-G2  
 <400> 6489

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 gttgtatcgc gacctgaatg aaataaacga aataatgctc ttgttcaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcccccaa 240  
 aaagattaaa agttaatta cccttaaagg aaaattaaaa ccccttcaaa agtttcccaa 300  
 aattcaaatt aaggggcttt ctttttaaaa attcttaagg ggaaaaaccc ggggttaacc 360  
 aaattaaacc cctttg 376

<210> 6490  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-G3  
 <400> 6490

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 cgttataaca ctttggtttt ctttcatttc catatttggg ttcatatgat tcattgttta 120  
 ttttaactttt ctttttggtc ttgtgaagtt tgtaacagtt ttgtaatttt ttacacatgt 180

ttactttttt ctcagtatag aatgtaaatt tttaaagcac acatgaaata ttttgggtac 240  
ccattgaaca tttttcagat acattatgta catgttttaa atacatgctt tgaacacttt 300  
ttcaaagtca tattatcagt atatattttc taaactatgc aaatatttgt ctgcattgta 360  
cataccattt cagaataatc acgaacatct actggaaata tatgatt 407

<210> 6491  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-G8  
  
<400> 6491

tccacggggc tgaagaaagt gagtgcgttg aacttacaaa agctgatata aactcacgca 60  
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cctatagtgg tctacatttg ttttgcttac agttgaaggc cctaacttgt agaacgatca 180  
acattgtgtc aagaagatgc aagtgtatgt acgcatgtgc aaggggaaca agaacggagt 240  
tacaagtgat gatttcagga ctttgaatcc accataatgg gtgcatgaag ccttggacta 300  
aatatacaag atgctacttc ataaatttcg ttccgaggct atttttaggtg ctgcgtcacc 360  
ttagtattgg gccaggccca tgtaatttcg aaataca 397

<210> 6492  
<211> 356  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-001-Q1-E2-G9  
  
<400> 6492

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gcgcagcctg ccccgatgtc ttgaaagggt atgggactcg ggttggccta cccgtgggtc 120  
attactccga caaataactaa gagaagtttg atacttgatg attgttttga gatatgagga 180  
tggtaatatt agagtcgtgc tagttgagta gttgtgaatt tgagaaatgc ttgtgttgaa 240  
gtttgcaagt cgcgtagcat gcacgtatgg taaacgttgt gtaacaaaaa tgaaacatga 300  
gggtgttattt gattgtcctc cttatgagtg gcggtcgggg acgagcgtg gtcttt 356



<210> 6493  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-001-Q1-E2-H10  
  
 <400> 6493  
  
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 tggccaaaca tacctctctt ttgaagaaca tgaagagaaa actcattttg gcgaaaacaa 120  
 aggttgcaaa agcagagatg gctttggcga aagttcagga atatctctct ccagcagagc 180  
 ttccaacgga tctggaaact gttacagacg aggagcgttt cctattccgc agaattggcc 240  
 tgaaaatgaa ggcttttttg atgcttggca ggcgggaagt ttttgatggt actgtgcaaa 300  
 acatgcactt ccattggaag catcgagaat tgggtcaaat tgttgtgaag gggaagacct 360  
 ttgaacaagt taaacatatt gctatctctc tagaagctga gagtggaggc gtgctcaatg 420  
 cactcgacaa gacaacaaa 439

<210> 6494  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-001-Q1-E2-H11  
  
 <400> 6494  
  
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 aaaggttgca aaagcagaga tggctttggc gaaagttcag gaatatctct ctccagcaga 180  
 gcttccaacg gatctggaaa ctgttacaga cgaggagcgt ttcctattcc gcagaattgg 240  
 cctgaaaatg aaggcctttt tgatgcttgg caagcgggaa gtttttgatg gtactgtgca 300  
 aaacatgcac ttccattgga agcatcgaga attggtcaaa attggtgtga aggggaagac 360  
 ctttgaacaa gttaaacata ttgctatccc tctagaagct gagagtggag gcgtgctcat 420  
 tgcactcgac aagacaac 438

<210> 6495

<211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-001-Q1-E2-H12  
  
 <400> 6495  
  
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 attgggaaag tggatactac ccacttactc tccacttcag tgaggactac cctagcaaac 120  
 ctcccaagtg caagttcccg catgggtttt tccacccaaa tgtctatcct tcaaggacgg 180  
 tctgcctctc gattcttaat gaggatagtg gttggagacc tgccatcact gttaagcaga 240  
 ttctagttgg aatacaggat ttgcttgatc aacctaatac agctgatacct gnccagactg 300  
 atggttatca cctctttatc caggatccag cagagtacag gagacgcatt cggctgcagg 360  
 ccaagcagta ccctgctctg gtttggggat ccaacgtaac agtctaaaat catgaattac 420  
 cgcacctgaa 430

<210> 6496  
 <211> 147  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-001-Q1-E2-H3  
  
 <400> 6496  
  
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 acattattac acggtggttc acttgacatt tccattatta gtactatgat ttcaatgttt 120  
 tgaaaactag gccttcagtt ctatgta 147

<210> 6497  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-001-Q1-E2-H6  
  
 <400> 6497  
  
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 gccaaactaaa ttaccaggta ctttcgtttc ttggtaatgg ttctaattgtt catgagaata 120

tgatgctgcc taaattggat acatttgttt tgcttacaaa tgaagggcct agcttggaga 180  
 aggatgaaca ttggagcaag aacaagcatg gagatgatgg catgtgcaag gggaacaaga 240  
 acggagttac aagtgatgat ttcaggactt tgaagccacc ataatgggtg catgaagcct 300  
 tggacgaaat atacaagatg ccacttcata aatttcgttc cgaggctatt ttaggtgctg 360  
 cgtcacctta gtattggggc aggcccatgt tatttcgaaa tacataagta taggctattt 420  
 ttagagtccg tatgtgttgg g 441

<210> 6498  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-H8  
 <400> 6498

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 atacagcgaa atgccagagg tagctagcgc ataatagtgc actagtagta gtacacttgt 120  
 atcagcttca gcaaacgatt ccctattccc aagaaattgc acgtatatgg agagttgagg 180  
 caaagaacct gtttcagcag tctccctaaa cccaaaaaat tatctcctca agtagtggag 240  
 agttgcaacc ctccccataa attttcaatg cttgccatgt cagtgcgccg cctccattga 300  
 ccgccgcgcg actggaccac tgccgcctgc tggaacatca ccgctggcgc cggacttctg 360  
 tgctgccgtt gctggacatc cgcgcgcccg ccagctgtca tcgcagcctt gacgaaaaga 420  
 tgcaaatggg agagagggga aaaa 444

<210> 6499  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-001-Q1-E2-H9  
 <400> 6499

ggtccgaata tccgggtcga cggggcgcca actgttgcag ccacaatgtt cccaccatth 60  
 gctagccaga cacagctaaa tgccagagct agctagcgca taatagtgca ctagtagtag 120  
 tacacttgta tcacttcag caaactactc cctattccca agaaattgca cgtataggga 180

gagttgaggc aaaaaacctg cttcagcagt ctccctaaac ccaaaaaatt atctcctcaa 240  
 atagtggaga gttgcaaccc tccccataaa ttttcaatgc ttgccatgtc agtgcgccgc 300  
 ctccattgac cgccgcgcca ctggaccact gccgcctgct ggaacaccac cgctgccgcc 360  
 ggactttctgt gctggcgctt ctggacatcc gcgcgcgcgg caactgccac cgcagccttg 420  
 acgaaaagat gcaaattgaga gagagg 446

<210> 6500  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E1-A3

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 tccacggcgt tgtatccgct gttgtatctg atgctcaaag tagatgtcat gtggcggcgc 120  
 cctcccgtgc tgcgaaaccg aaactgactt ggcctgagtt tcgtcgttgt tccatgctcc 180  
 cggctatcct agatggtagg taatgtcgga acacaggggg atgggtggggc agtgttggtta 240  
 ccatatgatc caaggggtac cttttctttc ttcatgctga accttgtact gtgtagcttc 300  
 tatgctggtg tttcatgcta gtgattttta gcagtaaatg catgtaacct gactatttga 360  
 atgatttgaa caaagttgtg cgaaaaaaaa aagaaggngg ag 402

<210> 6501  
 <211> 201  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-A5

<400> 6501  
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 cgcagttgtc gtcctatgtc aaggtatatg tcatgtggct gcggactccc gtgctgcgaa 120  
 accgagactg acttggcctg aatttcgtcc ttgttccatg ctcccggcta tcttgcacgc 180  
 taggtagtgt cagcacacac g 201

<210> 6502  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-B1

<400> 6502

cgacggggac ccataataat aaaactcgga tgacaacact ttctcaaat aatcataaca 60  
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 cacctttaa gatcaaggac tgactaaaca ttgtgattca tggtaaaaga gatccagtca 180  
 agtcataccc aatataaacc aaaagtaatg aatcaaatg acagtgttct ctccagcggg 240  
 tgcttttaat aagaaggggtg atgactcaac ataaaagtaa atagataggc cttttgtaga 300  
 gggaagcagg gattttaga ggtgccagag ctcgattttg aaatagagat agaataacat 360  
 tttgagcggc atactttcgc tgtcaatgca acaactatga gatggctgta tcttcatac 420  
 tacatgca 428

<210> 6503  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-B11

<400> 6503

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 tacaagcccc caaagggcag cagcagcagc agccgcacta gcagtggcag caaaaaggac 180  
 aagaagcatt ctaccacag cagcagcagc agcagtaaaa gagataagaa accttcccac 240  
 cgcagtagca atggtggcag cagcagaact gacactagt atcctcacca tcggaaggca 300  
 tatggcagca gcattaccag cagaactgat actagtgttc ctgaatatca taagttatcg 360  
 ccgtggcagc caccggctag tgccgcagt gaagaagcca tgccccctgt acctgt 416

<210> 6504  
 <211> 339  
 <212> DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-002-Q1-E1-B12

<400>      6504

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gactgtttca tgggccccctg acgtatatga tcctcctgtt acttctgact cacacacagt    120

gaagccgcac cagagagggtt caaggaagag ccactacaag tacaagcccc caaagggcat    180

cagcagcagc agccgcacta gcagtggcag caaagatgac aagaaacatt ctcaccacag    240

cagcagcagc agcagtaata gagataacaa accttcccat cgcaatagca atgggtggcag    300

cagcaacact gacactagtg atcctcacca tcggaatgc                                339

<210>      6505

<211>      262

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-002-Q1-E1-B3

<400>      6505

ctcccggttc gaacgggtcg ataactcttt ctttagcagc attgaaatcc tcttgaacct    60

ttagggaatg ccgctgcagt ctactaaaga aatcaaacag acccaactgc tcaactacaa    120

atttcgtagg agtaatctgt cgcacacatg cacctcatal cgagggtaaa tgattcaaaa    180

tgattgacga agctaaaatc taaagacaac ttaagattac tgaaaactgc ccaaagcaat    240

aatatgactg agttgttaga tg    262

<210>      6506

<211>      435

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-002-Q1-E1-D1

<400>      6506

acgggttatc ttggagtatt accatctttt atgtcaagga tgttgtgagg actgctccac    60

ctcttaaaga attcttggtg ttgtgatact tctcaccctc accattcttt cttgggtccgc    120

gtgttgattc taaccgggat accaacacgt gaaccatgct gcttggttc tgtacttcta    180

gcaaccctat tgctttgaag ttaatggtca acatttcac cttagaccat tggttattga 240  
atcaccattc taacattgat cctgctacct aagcccatat ttcgggtgca cttttcaacc 300  
agtgattaat tgtggtatgt ttccctcgag tatacatcat tatatcattt gatctgttaa 360  
atgttatctc cttgttcaca taattgtgga aatccacctt tttgtgaatc tcaatgaatt 420  
gtcactgagc ccac 435

<210> 6507  
<211> 184  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E1-D3  
<400> 6507

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cactatcatc ctgtacataa gcaaggcaac cccagtcccc aatctatacc tactttgtaa 120  
ggggagaagg tttcttactg ctgaattttc atccgttaat ttcgtttgtc catcacggta 180  
acaa 184

<210> 6508  
<211> 403  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E1-E2  
<400> 6508

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aagaaattaa taagggaaga caagattcac atgcaaatat accgtcttgg acttctttta 180  
tgattgtgag ccccatthaag tatttttatgt caaattattg acgttggaca aggaagacaa 240  
cataatgatt tatgtttgtt catattcaca cagaagttac tagcaaaaaga gcccggtcgt 300  
tgcaacggga gagaaaacat aacacacact cttaaccga caaccatcac ccaagactac 360  
aatatgtcca tcccctttta tttttcgaga tatcatattt gtg 403

<210> 6509

<211> 324  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E1-E3  
  
 <400> 6509  
  
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 gtggaggcgc tggcggagtc gtagtgtgga ggaccgccag cgatctggcc gtgtgtgctt 120  
 aggacagttt ttatcgaacc aaaaacttaa tttccaaata gccgcctcaa agcatatctt 180  
 ccaacaaatt ctgagttttt tttacgttgc atttctatcc taaaactttc cttttgttat 240  
 ttctcccatc ctgttgcgta tgtaaatttc acttccgcgt acatttttaa aacatttcaa 300  
 ttgtgaatgc acgaaatcaa tttc 324

<210> 6510  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E1-E4  
  
 <400> 6510  
  
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 tggtaacccc atctcaatcc caattaataa tcaataaccc cacaatttaa ttaagtaaag 180  
 tgatgagatc aacatagtaa ttcaagcacc agacactcaa gatgtccata accgggggaca 240  
 cggctaccat cattagttaa tacactctgc agaggtttgc acacttttcc ccacaagact 300  
 cgatctcttg cattgtattt cagcactgc atggtgtttg agaaatggat gatctagaca 360  
 cagtctttcc gaagaggtcc ccttaaccga tag 393

<210> 6511  
 <211> 245  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-002-Q1-E1-F6  
  
 <400> 6511



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gctctttctcg gcgtacgcat cacactagcg tgacttgtga agatatcaag tgcagcatgt 120  
aacaggggca gttagcctgt tctggaccaa tgagtgtatga gtaatctgct gggatattgt 180  
tcaggcggtc atgtgtatga ctcaaaataa tgagtgtgtt tcctttccac acttagcgat 240  
ataaa 245

<210> 6512  
<211> 461  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-002-Q1-E1-G1

<400> 6512

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ccccaggcat gtcgcggtga tttgatttga tttgcagagg gaggccagct attgtctgcc 180  
ttttgtgatc gtaatgttgc ttcctctata tatgagctat gaaaataatt aagcgatgcc 240  
tatctcattc ttacataac acccaccgta atgatttgtg gatctcacca ggatgggtgcg 300  
tatataatat gagcaacgtc gtggtgagat ccgcagatca tcacagtggg tgctacgtaa 360  
ggcatgtgat agacttatgc tgctgggggt aatgcttgc ttcagttttg gttctgcata 420  
tgttgtatgg ctatttttat acaaaaaagt atattttgtc c 461

<210> 6513  
<211> 152  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-H6

<400> 6513

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aacattccat tgcgataata tttgagctgc ctgccatcag tgtgcaagcc atccagaaga 120  
tcctgtcggt ctcgctggct ctgcaattgt tc 152

<210> 6514  
 <211> 272  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E1-H8

<400> 6514

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 atgccaacca atgcgcgacc aaggaaggct tcatctgtgc tgaatgcttc ttacaagggc 180  
 ttctctctaga tggtcctcca taacactgag acggatgttc agacctagca tctggatggg 240  
 tagtcattct ttgtagtcgg gatgggacca tg 272

<210> 6515  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-A1

<400> 6515

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 agcaccttta aagatcaagg actgactaaa cattgtgatt catggtaaaa gagatccagt 180  
 caagtcatac ccaatataaa ccaaaagtaa tgaatcaaaa tgacagtgtt ctctccagcg 240  
 ggtgctttta ataagaaggg tgatgactca acataaaagt aaatagatag gccctttgta 300  
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 attttgagcg gcatactttc gctgtcaatg cgacaactat gag 403

<210> 6516  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-A2

<400> 6516

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tcagcgaaaa tagccgaacg aagatgtagt gcagcggatg aaggttaaac atagcaaaga 120  
 cgatcatcaaa ccgcaggacg atcgtacccc cgatgtcgcc atccacaaag cccttgccct 180  
 ctggcacctt ggccacgaaa accgggtatg ccacatcctt ctctctgaga cgccgcttct 240  
 ccaaagaaag aacactgtcg tgcagactcc gcatagcacc ggttgcagca ttgagcatat 300  
 ttggtggtag catcgcccta cccgccacat gcaccctcct cgagatatcc tgcggtgaag 360  
 gtggcccgtc ctgagcacgg atcgtactcc gtgcgggctg gctcgcaccc ttcgtag 417

<210> 6517

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-A3

<400> 6517

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 atgtcatgtg gcggcgccct cccgtgctgc gaaaccgaaa ctgacttggc ctgagtttcg 180  
 tcgttgttcc atgctcccgg ctatcctaga tggtaggtaa tgcggaaca caggggggatg 240  
 gtggggcagt gttgttacca tatgatccaa ggggtacctt ttctttcttc atgctgaacc 300  
 ttgtactgtg tagcttctat gctggtgttt catgctagtg attttttagca gtaaattgat 360  
 gtaacctgac tatttgaatg atttgaacaa agttgtgctg 399

<210> 6518

<211> 113

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-A4

<400> 6518

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<210> 6519

<211> 89

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-A5

<400> 6519

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 ggtaatgctg ttgcagttgc tgttgctgc 89

<210> 6520  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-A7

<400> 6520

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 agttcgaatc ctctccagt acgcctcggg cctcctttta aagccaaagg ggtcgccaca 180  
 gtggcacaca ggaggtggaa agtttgtact gtatacaagt ctatcgcttg gcaccgtagg 240  
 aaaaaacaca tttaatgcgc tgccgacgtg cctcttact ttactgggga cgacaaggaa 300  
 gctcgtccca tccgccgccg ctctgtctcg ctctgacgcg cgtccaggct gactaggcat 360  
 gcagcgccat gctggttggg tgctga 386

<210> 6521  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-B1

<400> 6521

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 catgatatta caaaatggta tctcgctagc ctttcttaag accgcaaac ataaatgcag 120  
 agcaccttta aagatcaagg actgactaaa cattgtgatt catggtaaaa gagatccagt 180  
 caagtcatat ccaatataaa ccaaaagtaa tgaatcaaaa tgacagtgtt ctctccagcg 240  
 ggtgctttta ataagaaggg tgatgactca acataaaagt aaatagatag gccctttgta 300

gaggggaagca gggatttgta gaggtgccag agctcgattt tgaaatagag atagaataac 360  
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<210> 6522  
 <211> 348  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-B11  
 <400> 6522

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 acttctgact cacacacagt gacaccgcag cagagaagtt caatgaagaa ccactacaaa 120  
 tactagcccc catatggcag catcagcagc aaccgcacta tcagtggcat cagaaaggac 180  
 aagaagcatt ctcaccatag cagcatcagc agcagtaaaa gagataagaa agcttcccat 240  
 cgcagtagca atggtggcag cagcagaact gacactagtg atcctcaaca tcggaaggca 300  
 tatggcagca gcattaccag cagaactgat actaatgttc ctgaatat 348

<210> 6523  
 <211> 357  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-B12  
 <400> 6523

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 acttctgact cacacacagt gacaccgcac cagagaagtt caaggaagag ccactacaag 120  
 tacaagcccc catatggcag cagcagcagc agccgcacta gcagtggcat cagaaaggac 180  
 aagaagcatt ctcaccacag cagcatcagc agcagtaaaa gagataagaa accttcccat 240  
 cgcagtagca atggtggcag cagcagaact gacactagtg atcctcacca tcggaaggca 300  
 tatggcagca gcattaccag cagaactgat actagtgttc ctgaatatca taagtta 357

<210> 6524  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-B3

<400> 6524

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acattgaaat cctcttgaac ctttagggaa tgccgctgca gtctactaaa gaaatcaaac 120  
agacccaact gctcaactac aaatttctta ggattaatct gtcgcacaca tgcacctcat 180  
accgagggtta aataattcaa aatgattgac gaagctaaaa tctaaagaca acttaagatt 240  
actgaaaact gcccaaaaca ataatatgac tgaattgtta gatggaacca aaaaggaaat 300  
tgtatttatc aagtttatta atctgcatga actaagacag tctccgatat tcaagaatgt 360  
agtggctctt gatttttaat cagagataac aaatgaccag atgcgtacaa t 411

<210> 6525

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-B4

<400> 6525

attcacgggt cgacgggggtc tcaactggtcc atatctcttt ctttagcaac attgaaatcc 60  
tcttgaacct ttaaggaatg ccgctgcagt ctactaaaga aatcaaacag acccaactgc 120  
tcaactacaa atttcttagg attaactctgt cgcacacatg cacctcatal cgagggttaa 180  
taattcaaaa tgattgacga agctaaaatc taaagacaac ttaagattac tgaaaactgc 240  
ccaaaacaat aatatgactg aattgttaga tggaacccaa aaggaaattg tatttatcaa 300  
gtttattaat ctgcatgaac taagacagtc tccgatattc aagaatgtag tggctcttga 360  
tttttaatca gagataacaa atgaccagat gcgtacaata gagggaagga gaagatactc 420  
acgtgtgttag cgcgcttgaa ttt 443

<210> 6526

<211> 188

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-B7

<400> 6526

gacggacggg accaatgctg ctgctgctgc tgatgggtgct gttgttggtg gtgatgctgt 60  
 tgctgttgct gatgggtgctg ttgttggtgg tgatgctggt gctgttgctg ttgcagcggc 120  
 ggcagcttct caaaacgcag aaactgcaac accaaaaaca ccagaaaatg gagacagaga 180  
 atacccaa 188

<210> 6527  
 <211> 172  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-B8  
 <400> 6527

tcgacgggac ggtaccaatg ctgctgctgc tgcagatggg gctgttggtg gtggtaatgc 60  
 tgttgctggt gctgatagtc ctgttggtgc tggcgatcct gttgctatta ctgtcgtctc 120  
 tgcaccgact tatcaattca gtgatcagtt atctcaacta acatgaccat tt 172

<210> 6528  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-C1  
 <400> 6528

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 cattttattt tgtttttctt tttgtttgaa taaataccaa gatcttaaatt tcttaaattg 120  
 tagagagtct tcacatagtt gcataattat tcaactactc attgatcttc acttatatct 180  
 tttggagtag tttgtcattt gctcttgctg ttcacttata tctttttaga gcacggcggt 240  
 ggttttattt tgaagaaatt gttgaaatct catgcttcac ttatattatt ttagagagtct 300  
 ttagaacagc atggtaattt gcttgggtta taaaattagt cctactatga tgggcattca 360  
 agatgggtat aataaaaact ttcattgtaga gtgcattgaa tactatgaaa ag 412

<210> 6529  
 <211> 161  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-C12

<400> 6529

aactggtacc ctgcagtacc ggtcgaaatc cagggtcgac gggggggggc gccccagcg 60  
ggggcgcccc ccaatgtctt cgaaacggtg ttggccccct ggtcttcac cttatccaag 120  
aattttcctt aatttttcca aagggtttcca acgaatttca a 161

<210> 6530

<211> 75

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-C2

<400> 6530

ggtagcaatg ctgcagctgc tgctgatggt gctgttggtg gtggatgatgc agttgctggt 60  
gctgatcgtg ctggt 75

<210> 6531

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-C3

<400> 6531

gtccacgggg tctcactggt ccatatctct ttcttttagca acattgaaat cctcttgaac 60  
ctttagggaa tgccgctgca gtctactaaa gaaatcaaac agaccact gctcaactac 120  
aaatttctta ggattaatct gtcgcacaca tgcacctcat accgaggta aataattcaa 180  
aatgattgac gaagctaaaa tctaaagaca acttaagatt actgaaaact gcccaaaaca 240  
ataatatgac tgaattgtta gatggaacca aaaaggaaat tgtatttatc aagtttatta 300  
atctgcatga actaagacag tctccgatat tcaagaatgt agtggctctt gatttttaac 360  
cagagataac aaatgaccag atgcgtacaa t 391

<210> 6532

<211> 358

<212> DNA

<213> Triticum aestivum



<223> Clone ID: LIB104-002-Q1-E2-C4

<400> 6532

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ggatggcaat gaggtgttct ttgcacaa gagatctacc cagctgaaga agctgatgaa 120  
tgcctactgc gaccgccagt ctgtggatat gaaagctatt gcattcctgt ttgacggtcg 180  
caggctccgt gccgagcaga cccctgatga gcttgagatg gaagatggcg acgagatoga 240  
tgccatgctc caccagaccg gagggcgct cctccacgc gcctagaaga agccgttgag 300  
agtctgctt gttgtcggtc tacaagactc tgattcatca ttagagagca catgaacg 358

<210> 6533

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-D1

<400> 6533

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ccacctctta aagaattctt ggtattgtga tacttctcac cctcaccatt ctttcttggt 120  
ccgcgtgttg attctaaccg ggataccaac acgtgaacca tgctgcttg attctgtact 180  
tctagcaacc ctattgcttt gaagttaatg gtcaacattt catccttaga ccattgggta 240  
ttgaatcacc attctaacat tgatcctgct acctaagccc atatttcggg tgcaccttct 300  
aaccagtgat taattgtgta tgtttccctc gagtatacat cattatatca tttgatctgt 360  
taaagtgtat ctcttgttc acataattgt ggaaatccac ctttttgtaa atctcaatga 420

<210> 6534

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-D3

<400> 6534

ttcacgggtc cacgggcaaa aacaaagggt gtccaaggaa ccacaatagt attccaagca 60  
ctatcctttg gcactatcat cctgtacata agcaaggcaa cccagtcctt caatctatac 120

ctactttgta aggggagaag gtttcttact gctgaatfff catccgttaa tttcgtttgt 180  
ccatcacggt aaaaaaaaaa aaaaaaaaaa aaaaaataa aaaaataaat aaacataaaa 240  
aaaaaatcaa aaaacaaaaa aaaaaatcaa cccccataaa aaaaaaaaaa aataaaaaaa 300  
aaaaggggag ccccaaaagg ttcaagcctt acttcccctt aaatgcaatt tcaaaccctt 360  
ccaaaagggc ccccaaattt aattccaggg ccgtcctttt aaaaagtcct taccggg 417

<210> 6535  
<211> 360  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E2-E2  
<400> 6535

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aagcagtaaa atttattgaa agttgacaac cataccattg gccaggagc cattccagaa 120  
agaaatttat aagggaagac cagaatcaca tgccaatata ccgtcctgga cctcctttaa 180  
gaatgtgaac cccaataagt aatttaagtc aaattaatga cgtttgacaa cgaagacaac 240  
ataatgatat aagtttggtc aaaatcacac acaaagttac tagcacaaag agaccctgtc 300  
gttgcaacgg gagagaaaac atatcacaca ctcttaaacc cgaaaacatc acccagcact 360

<210> 6536  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-002-Q1-E2-E4  
<400> 6536

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ttccctacaa caaaggaata tattttatft aactacaatg tttgttgaaa aacatttaga 120  
atggtaacct catctcaatc ccaattaata atcaataacc ccacaaatta attaagtaaa 180  
gtgatgagat caacatagta attcaagcac cagacactca agatgtccat aaccggggac 240  
acggctacca tcattagttt atacactctg cagaggtttg cacacttttc cccacaagac 300  
tcgatctcct gcattgtatt tcacgcactg catggtgttt gagaaatgga tgatctagac 360

acagtctttc cgaagaggtc cccttaaccg atagatagggc cggtacacct acaatcccct 420

acatctgcta acccatcatg cg 442

<210> 6537  
<211> 450  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-E6

<400> 6537

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tggagcactt tccaagaaat aaagtcaaata taccttatga atctatcatg cgggctactt 120

ctgaatcaag tgccaaagat ggcactccgt tagattaacc ttccgcttta ggccaaccta 180

ggggcggttaa aataatagcc ctagttggga ggcaacccaa ttttcttcat gtcctttgtt 240

ttgggtccctg tttagtgtta aattttgttt ccactttcta tttagatgtg tttttatctt 300

ttaattagtg tttgtgccaa gtagaaccta taggataaac tatgatgata gtttatttga 360

ttctgctgaa aaacataaac aattcaataa atcacagaga cgtacttttg tattgattct 420

ttttgctgct gatcaataaa caaattgtcc 450

<210> 6538  
<211> 105  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-E7

<400> 6538

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agttacctgt acaatctatc atgcgggcta cctctgagtc aagtg 105

<210> 6539  
<211> 425  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-002-Q1-E2-F2

<400> 6539

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 tataaatagt tgcactctca tgcttcactt atatcttttt gagagttgat aatagtaatg 120  
 acaattagtg tgggttataa atttggctct aatgtgatag gtattcaagt gggatataat 180  
 acaaaactttc atgtagatca ctgaaaatga taagtttgat tccttgcaat agtttgcgat 240  
 ataaatgtgg taatatgcgg gttgtgctag ttagtaattg tggtttagta agaataattg 300  
 tgtaaggtt cgtgattccc gaagcatgca cgtatggctc ctcgttatgc tatgaagttg 360  
 catcatgatt tattattgat tgtcatcctt atgagtggcg gtcagggatg agcgatgggc 420  
 ttttt 425

<210> 6540  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-F3  
 <400> 6540

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 caggaaatca gggaatgcaa tcaccctaca gatccagttc gtttcctgca cctcagtatg 120  
 cactgcagag agagaatgtt tttcctgaga gacctgatca accggaatgc atatactaca 180  
 taaagactgg agattgtaaa tttggtgcag tttgcaaatt ccatcatccc cgtgtgcgtt 240  
 cacagcctcc ccagactgt atcttgagcc caatgggtct tccattacgc ccaggggaag 300  
 agctctgcaa gttctattct cgctatggca tctgcaagtt cggcgtaaac tgcaagttcg 360  
 accacccgat gggggctccg atgggggtct acgcgtacgg ctactccgcc tgggggtcgc 420  
 ccaacgcgcc c 431

<210> 6541  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-F4  
 <400> 6541

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ctcgccaaac acctcggcca ggaaaagccg aggacaatgg cagccttaac aagcctcatg 120  
 acccgctttt gcgcgggcga ggatagtgg ctagcccata gcggcaccag tgaccagga 180  
 acatccgaag tcagagatgg caacggaaat ccgtgacgca ataaaaa<sup>a</sup>caa gcgtcgaaac 240  
 aatgaaaaca gccagataa cacgacagtc agtgccggat tcaggggctc tcgaccgggt 300  
 caacggaaga agccatttaa aggcagtaga gatggaccgt ccagcctgaa taagattcta 360  
 gacaagttat gtcagattca tggcaccccc gaaaaacctg caaatcacac ccatagtgag 420  
 tgctggggtt 430

<210> 6542  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-G8  
 <400> 6542

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 gggcatgatg gagaagatca aggacaagat cagcggcgac ggccacggcg acggcaagaa 120  
 ggacggcgac cacaaggaga agaaggacaa gaagaagaag aaggacaaga agcacggcga 180  
 gggccacaag gacgacgacg gccacggcag cagcagcagc gacagcgaca gcgactgagc 240  
 cagctccggc cgcgctccgg cagcagcgtg cagtgtaggc gagatcgatg aacgcttggg 300  
 agaagtgtgg catacatata tgttgcaggg tttggagcgt gtggtagcat atgtatgtaa 360  
 tgcgtagcat gtctcatgga tcttgtgatg taaaataatt acccggtgc actgcacggc 420  
 acg 423

<210> 6543  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-H2  
 <400> 6543

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 ttaattagtg tttgtgccaa gtagaaccgt tgggaagact tggggaaagt ctttttgatc 120

ttgctgtaaa aaacagaaac tttagcgctc acgagaatct atgccatttt tatttggaag 180  
 gtgatattta gttattatt cttgaagatg attaacagat aaattactca cttccagaaa 240  
 tttattttat aatttttggg gttccagaac gtgcgtagc tacagattac tacagactgt 300  
 tctgtttttg acagattatg tttttcttgt gttgtttgct tagattgatt aatctatggc 360  
 tagtaaaaga gttttataac catagagaaa tttggataca gtaggtttta ca 412

<210> 6544  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-002-Q1-E2-H4

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 aacaaacaat atggtaaag cacaagcata aacatggcat gatgcacaaa caagtatgat 120  
 gcatgtccgg tttaatgagg catggcatgg caaagtgcaa caaacaacac taaaattaa 180  
 gtggagctca atatgcaacg agttgcatat tgacaaaact tcacaacatt tatttagttt 240  
 gctctctttt aggtacgcaa taatattaaa tgttgtaaa catggcaaga ggtgaagcaa 300  
 gagaaaacta cctatctagg caagttttaa tgaggtcgga acaacanaca acaatttccg 360  
 gaaaatcctc atatgcaatt tatgaattag ctactgttct gcccaaaa 408

<210> 6545  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-002-Q1-E2-H8

<400> 6545  
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 catctgtgct gaatgcttct tacaagggct tctcagagat ggtcttccag aacaatgaaa 180  
 cggatgttca gacctaccat ctggatgggt attcattctt tgtagtcggg atggactatg 240

gtgagtggac gccaaacagt acgggttcat acaacaagtg ggatgccatc tctcgcagta 300  
ctacacaggt cttcccaaga ggggtggactg ccgttctggt ct 342

<210> 6546  
<211> 73  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-A1  
  
<400> 6546

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cacattgggt tca 73

<210> 6547  
<211> 336  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-A11  
  
<400> 6547

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gttttcagtt gaagaaccga ttgaggccgt ggcaaaaaga gaagagctgg agcaccttgc 120  
catgatttgc agatctgaag ctgatgcaat ggggaggatc actgctggaa ttctccgtct 180  
gcttaaactt gataagtctc ttgggcaggg aaccatcgaa cagctgagga acctaggaag 240  
tggaagcctg gacaacattt tctcgcctag caggttcagc aggcacaaca gttttggcat 300  
cgtaagcacc cctaggaccc ccaggagccc aatggt 336

<210> 6548  
<211> 227  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-A12  
  
<400> 6548

gtcgacgggg aagaagatga agaggaagaa gaagaagaag aagaggaaga agaagaagaa 60  
gaagaagaag aagaagaaga agaagaagaa gaataagaag aagatgaaga tgaagaagat 120

gaagaagaag aagatgaaga agaagaagaa gaagattaag atgatgtaga agaagttgta 180  
taagaagaat gaagaagaag aagatgaatt tgattatgat gatgttg 227

<210> 6549  
<211> 337  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-A3

<400> 6549

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gataaggatc accttgagga agaagaggac gagtaagagg acgaagtcga tgacctcgag 120  
ctgaacttga catctacgac gactccgttg agacagctca gccgtgcgaga cttgacgagg 180  
ttgaagcaag ccataaagag tgcgatcggt aggatcatct acgggagaaa gccgtgaggac 240  
cagtcaaggc agagtagaag aagaatcggc tgatgaagac gaagagtctt caatagaaga 300  
ggccgagtcg ctataccgga tgcaagaaga tcaggtg 337

<210> 6550  
<211> 413  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-A4

<400> 6550

aaagaaaagg aaaacccggt gggattcctt ttaacaaatt cccaataac aagcaaaagg 60  
ccctccgacc tttcccaaaa aaccttgagg atccggtggc ataaaaggac caaggaaagc 120  
ccaaaggcaa tgaaccatca aaataaactt tccccgaaca aaatttcaat caagcttcaa 180  
aaggacgaaa cataacttac aatttggaag caccaattgg atcgtgatgt tgaaaccctt 240  
aaagcaaaat ctaacatcgg tagcaatcgt acgtttttga atcgagtcgc gatcgaatgc 300  
agtgcacctg aagaattatt cattaagat cagtcactga ctaatgaaaa tgtggacaag 360  
attgtcgggt acgctgtcag ttatcatctt aagcacaata aagtcgaaac etc 413

<210> 6551  
<211> 400  
<212> DNA



<213>       Triticum aestivum

<223>       Clone ID: LIB104-003-Q1-E1-A7

<400>       6551

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gcctaggcct gagctggaca tctacaccga ccccgctcag acggctcagc gtgcgagatc   180

taccaggtt aaaccggcca tgaagcgtgc cttcgttggg gtcattctac gaggagagcg   240

tgaggacgaa tcagagcacg gtaacgagac cgtcgtctat tccggcgacg agtcttcgac   300

cggagagacc gagtcgctat accggatgca agacgatcag gtgaggggtt gttccgatgg   360

cgacagtatt ccggaccccc caaggccaga tcgaccgggt                               400

<210>       6552

<211>       297

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-003-Q1-E1-A9

<400>       6552

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aactgacttg cgcgctctc tccgctcgtg ggactcgggg aaacagtgtt ccccttcgaa   180

ctgttgcct gtaggttttg gactagaatt tggaagattt atatagagaa aatgcactgg   240

cggtacttga acttgaaaag aaaaatataa caaatctaa aaaaaaaaaac gcggccg       297

<210>       6553

<211>       429

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-003-Q1-E1-B4

<400>       6553

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aggcatgttc aaccaataat ataacaaggg aatcaattt tttccgggta aaactaaaac 120  
aataatgcc aagaaggtaaa aagttaaggg aagggtttta tccgaaaaaa ttgcaaattt 180  
tccccaatat aactgcaacc aaaagctgct gccgttggtt ggtgttaaaa tcaaagttac 240  
tgccagaatg gaattgtatc gcctggaaat caatcttttt tgtttctcca aaaaaaaaaan 300  
aanaaaaaaa aaaaaaaaaa aaaaaaaaaat aaaaaaaaaa aaaataaaaa acaaattaaa 360  
tttatataaa ataaattaat ataaaaaata tcctaaaatt aaaattaaaa aaaaaaaaaa 420  
aagggggccc 429

<210> 6554  
<211> 176  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-B9

<400> 6554

atggattttg aaaaccatga aatttctgaa acaaagaaaa ttcacctaa gactcatcac 60  
gatgtggact ttgaagtaat tctatataat tctgagagcg taaccattt tggttgcaaa 120  
aactgggaag catTTTgcaa gatgtatggt tttgatgaag gtatgcttat caccat 176

<210> 6555  
<211> 276  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-C1

<400> 6555

gggtcggccg gttggtagtt ttgatcacag tgcttcactt atatcttttg agcgtgataa 60  
tttttgctct agtgcttcat ttagatcttt tagagcatgg tgggtggattt gttttaaaga 120  
aactattgat ctctcatgct tcacttagat tgTTTTgaga gtcattaata gcatggtaat 180  
ttgcttaaata attaataatac ttggtattca agatatgtga aactttcttt tgagtgcgtt 240  
gaatactaag ataagtttga tgcctgaaaa ttgttt 276

<210> 6556  
<211> 321  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-003-Q1-E1-C3

<400>       6556

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gcagggtgggc gactcatccg acacgagggg ccggtcgtcc tcgggcaggg accagtcgtc  120
gagcgccaag aactacgagt ccacgggtgcg gggcatccag ggcttcaact ttgacggcga  180
cgacaccagg aaccactact agggccccgag gcggcggcgg aggaggccgg gcaaaataag  240
aggtgtggcc tggcaagggt gtctcagcca ggcagtgggt accacggggc ggcggtgcggt  300
ggtctcttta taacgaatga a                                     321
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<210>       6557

<211>       347

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-003-Q1-E1-C8

<400>       6557

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gtggacaaat ggataaatgg agtgcacgag agcaatggta tcattagctc ttgggtccgt  120
ggcaatgacg tttgcggtgc tttccggaat gtaacgcttt ccatattgta ctttgaagtg  180
tgatacattg gtgtttacct gcattctcat gttaacttgc aggttttggt ttaccttctc  240
gcattggtgt accgaatgaa tgtttttgta tactaaaagg aatgaatgtg gcagttgtat  300
actaaaagaa tgttattttt ttaaaaaaaaa aaaaaaacca acaaaaaa          347
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<210>       6558

<211>       363

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-003-Q1-E1-D4

<400>       6558

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caccagaaca acgtcatcat caacaacctc cacgtgcacg gcattctaca cacgtcgggc  120
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cgcaacgtgt cgatgaecggc aaccactcc aagattcgta cccgcgccga ccgcgacggc 180  
gtctccatct tcaacgccac caaagtgttg gtggaccacc tgtccatggg taattgcat 240  
gacggcatga tcgacgtggg ggccatgtcc acggccgtca ccgtctccaa caccacctg 300  
gccaccaca acgacgtgat gctcttcggc gccaccgatg ggaagganga ngacaagggtg 360  
atg 363

<210> 6559  
<211> 363  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-D6  
  
<400> 6559

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aattagctaa gtgaacggcc gatgaataaa cactatcact gccatgataa agaggattac 120  
cataggctgg ggccaagtgg ctacatgggtg gcccggccta cgccgggataa ggctgagcaa 180  
gagatgctgg atgcacgggt cagtccagtt acattgagct ggctccccag gtgcaggact 240  
tggtttctatg tgcattggggg agcgttggcc ccaacgacag ccaagggttt gaacaacgca 300  
agccttaaag gagccacct aaaattactt gttgcaatag aataggctca aacaagggtt 360  
ttc 363

<210> 6560  
<211> 435  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-003-Q1-E1-E3  
  
<400> 6560

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catatacgta ttgcaatagt ctaaaagcca ttgctcagaa tgtattacgc gcatgctcct 120  
agtgggatag attggttaga aaaggccatc gctcgtcccc gaccaccact cataatgaag 180  
acaatcaata ttacaattgt gtcacaactt catcacaag cggttcacca tacgtgcatg 240  
ctacgggact cacatacctc aacacaagta tttctactaa tccacaatca ccactagca 300

taactcta atcaccacct ttatatcgca aaactattgc acggaatcat acatatcata 360  
 ctcagcgatc tacaatttga tgtacgattt tatgactaat catgtgattg accaattcct 420  
 gtcattctct catat 435

<210> 6561  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-E9  
 <400> 6561

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 catctcctgt cccatgccgc tgacgggtcc tctcccact ttgctcaaaa tcgctaggga 120  
 gcacatcgcc gccgtccggc ccttttccat tgcacaacga catatttttt ttcactgcac 180  
 cgcccagcca tctcatcttc cctcaagatc ttgtatgtcg tgttgcgaga tcaagtaacg 240  
 tctccccacc aaaggaattg agtatggagg aggcgaggac gtgttcatct cccgctccgg 300  
 cgagattcag ttctgctctt gggtttccac gacatcatga agttcctttg tgtagacaag 360  
 cacctcagca ctctagatcg ataatcctaa tacttcaaag ccaaggagta gaaaaactga 420  
 aacgacg 427

<210> 6562  
 <211> 87  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-F3  
 <400> 6562

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 ttgtgcacat tggatattca ctcatat 87

<210> 6563  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations

<223> Clone ID: LIB104-003-Q1-E1-F4

<400> 6563

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cggtcggtg gtgtctgtgc gcgtgtgccg ggacgtcaac accaggatgt ccctaggcta 120  
cggtacgtc aacttcagca tccctgccga tgctgcaagg gcattggaaa tgctgaactt 180  
cactcctgtt aatgggaagc ctataaggat aatgtattct aaccgtgacc ccagctcacg 240  
taaaagtggg gctgcaaata tatttatcaa gaatcttgac agtcaatag ataacanagc 300  
gctctatgac acattttctg cctttggaaa cattctttca tgcanagttg ctacagaaat 360  
gtctggagaa tccaaggcta tggttttgtt cagtatgagc aggaccaatc aacacagaat 420  
gcaatcaatg agctcaatgg gatgcttttg aatgac 456

<210> 6564

<211> 282

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-003-Q1-E1-G11

<400> 6564

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tcgagggatg cctcgccgca ctgtgctgct gctggatctg cgagatgtgc tgcgactaac 120  
cgccgggccg gcgaggccgc tgctggctgg cacaagacct cggtgctata gtaccacga 180  
ggaggaggag cgtatgcgta tacagagaga gaattgttct taatttcagt gcccgttgtt 240  
ttaggttcta tacagtatat actcctaagt tgatgcatgc at 282

<210> 6565

<211> 311

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-003-Q1-E1-G3

<400> 6565

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tcctcagtgg gcagtcgtan gtgacacctt tcccgctcngc tgcccgttcg acgaatgcaa 120

cggtcaacttc aagtacttca aggagaaacct gactaccaca acccgaggtt caacaccaag 180  
 ttccgggtct actccgagng gtgcgggctg gacaacgtgc tcatgtcatg gggccatgac 240  
 gactacatgt gcctgggtgc caaggagaaac aagaacaccc ttcttccgc anggctgttc 300  
 atcatcagat a 311

<210> 6566  
 <211> 104  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-G4  
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 catgatcctg acggtgaagc cagacaacat ctgcagcttc atct 104

<210> 6567  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-H12  
 <400> 6567

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 aaagcctaag cttggggatg ccccggaagg catccctctt ttctgtcttcg tctatcggtg 120  
 actttacttg aggctatatt tttatgcacc acatgatatg tgttttgctt ggagcgtctt 180  
 gtatgatttg agtctttgct tttagtttac cacaatcatc cttgccgtac acaccttttg 240  
 ggagagacac acatgaatcg gaatttatta gaatgctcta tgtgcttcac ttatatattt 300  
 tgagctagat aattttgctc tagtgcttca cctatatatt tttagagcac ggtgggtggtt 360  
 ttattttata gaaattattg atatctcatg cttcacttat att 403

<210> 6568  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-003-Q1-E1-H6

<400> 6568

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaagttag cccacaaaaa aattaaattt aaaataaagt gaaaagaata 300  
 ttaaaaacca ctaaaagggy ccactaaat taaattaaaa gggctttatt aaaaaactgc 360  
 aaaaagggaa aaaccttggg ggaaacaaaa taaaaccctt ataaaaaaaa cccctttt 418

<210> 6569

<211> 302

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-A1

<400> 6569

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 attcatcagc tcaacctaac ctgggtacaa agctaattca tcagctcacc agtgatcatg 180  
 cgtgttgctg aatatctcat ctatgtgcgt gttgtgtaat gagattaatg tgggaataca 240  
 tcatgggcgg agtcaggatt cgaaaaanaa aannnannna aaaaaaaaaa aagcgggcgc 300  
 tc 302

<210> 6570

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-A10

<400> 6570

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 cacttcaggt gcacgatcct tccgcaggag gagaagatcc cggcaatcat ctcccgttc 120



acggtgttcc atgagacgtt catggcagag taccgtgact aaactgggtgt aacatgtgtg 180  
ggattacatg caagcctcat ggattttccc taggcgtttt tgcccgcgtt gacagcagta 240  
tcctgtagat gagacaaaat aaagcaaata catggccttg gtgtgtgata ctatatcaga 300  
ttaccagtct gatgcctttg atggtaaatt ggcaactgag aatttttatt tcaaaaaaaaa 360  
aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaagcg 420  
gccg 424

<210> 6571  
<211> 302  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-A11

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cgatggatgg gttctaggag tttttctttt ggacggggga tgtacgaaac tgacttgcg 180  
gcgtctctcc gtcgtggga ctcggggaaa cagtgttccc cttcgaactg ttgtcctgta 240  
ggttttggac tagaatttg aagatttata tagagaaaat gcactggcgg tacttgaact 300  
tg 302

<210> 6572  
<211> 363  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-A12

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cggtttgggt tgtgctgcc cttataacgt tgatgtccat cgaggccaat ttccggtgg 180  
ttgtcctcct cggttcggt gacgttgga ccgtcttctg aacctccctg ctttggttta 240  
agtcccggt aatctatctt gctttgact ctgacctga ttgggtccag gctaaacca 300

tcatgctctg attgccaata tgttttatgg tcttgggcta accattttta acccaaatgc 360  
cga 363

<210> 6573  
<211> 403  
<212> DNA  
<213> Triticum aestivum  
  
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<400> 6573

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atgatgagag gaagccgcgg tacaagaagc acgacgacga cgatgatgga cacgatagga 180  
ggccgcggta caagaaacgt gacgacgacg acgatgatga cgatgacaga aagccacgtt 240  
acaagaagcg ctacgacgac gacgacgatg atgatacgaa gccacgttac atgaagcacg 300  
atgattatga tgacgacgac gatgatagga agcagcgctg cggaacaac cgccgccgcc 360  
acgatgacga tgactgatta tgacatgagt ttaagctgac gct 403

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<213> Triticum aestivum  
  
<223> Clone ID: LIB104-004-Q1-E1-A5  
  
<400> 6574

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tatcgcggtt ggaattgcaa ttggagcggg tatgcatacg gttgttcacc tgacctgcga 120  
cttccaaggg ctggtctcct gcccaagtga caagttccag gagaagctgg ggcccttctt 180  
caactatggt caaccaacat ggggaactct gttcgcgagc actccagggt ggactggtat 240  
cctcctgggc ctcataatgt cattctcctt tacactggcg acaacctcct tcaggaggag 300  
cgtcgtgaag ctgccatcgc cactgcacca cctggctggc ttcaattcct tctggtatgc 360  
ccaccacctg ctggtgtttg catatatcct tctggtgatg cactoctact ac 412

<210> 6575

<211> 335  
 <212> DNA  
 <213> Triticum aestivum  
  
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 gttctaggag tttttctttt ggacggggga tgtacgaaac tgacttgcg cgcgtctctcc 180  
 gctcgtggga ctcggggaaa cattgttccc cttcgaactg ttgtcctgta ggttttggac 240  
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 aaatcaacaa aacataaaaa aaaaaacgcg gccgc 335

<210> 6576  
 <211> 328  
 <212> DNA  
 <213> Triticum aestivum  
  
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 agtcgagagc ttatatatga aaactagtga gagagagaag actatattta tgcaattaga 180  
 agagaactat atacattgtt tttcccctaa gctcaataag gtctgtgtcc tttgtggact 240  
 gcgtttcttc tttgtagaga cagaacatat aatactgagg attgcagtca aatggaaatt 300  
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<210> 6577  
 <211> 265  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-004-Q1-E1-B2  
  
 <400> 6577  
  
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agccaactca acttcggggt cctgtaatgc aagcatgcat gcacaaataa atccttcaag 120  
 ttcaagggcc aagatttga ccaataattc aactccttgg ttccaaataa cccaatggat 180  
 aattaaatcc aatacaacca aaatccaata acctttaaat tgccccatta taccctaaaat 240  
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<210> 6578  
 <211> 334  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-004-Q1-E1-B3  
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 ctgcgtctgc ctgcacctca agggcggttcg tctatctgtg tcatgctcgg gacgatgcac 180  
 taatgcaggg tgtggttctt cagatcttct tttgtctttt cttgggtatgt atatctctga 240  
 atcttgtgag ccgtgatttt catgctgccc attgtgtcat gtataatgat tcttcttatt 300  
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<210> 6579  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 6579

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 aaagcctatt tgattagaat ttcaagaata cccaaggtgc ttcacttaaa ccttttgagc 180  
 ttgatagttt ttgctctagt gntcaccta aatcttttag agcacgggtg tgactttatt 240  
 ttgaagaaat tactagtctc tcatgcttca cttatatatt tttgagagtc ttttagaata 300  
 gcatgggtatt ttctatgggt ataaaattgg tcctagaaag gtaggcaccc aagttgggta 360  
 taataaaaac tatcatanga agtgaattgg atgctatgat caatttgata attgataatt 420

gtttggagat atggaggtan tgatataaa

449

<210> 6580  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-004-Q1-E1-B9  
  
<400> 6580

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atgaacgagc ccagatgcat caccgatccg tccggttaaca ctctgcagcg ctggatccag 120  
gagatggctg ggtacgtgaa gtcgatcgac aggaggcatc tgctgaccgt cggcaccgag 180  
gggttctacg gcccgcagag cccaccggag aagctcagcg tgaatccggg gcactggttc 240  
aacaactacg gctcgcactt catccgcaac tccaagatct ctgacatcga cttcgctctc 300  
gtccaccttt acccggacac ctggctgctg caccggaatt tggaagagaa gctcaagttc 360  
gtgacgcagt gggtagctc ccacttcgag gacggcgaca cggagctcgg cggcaagccc 420  
gtggtgctca 430

<210> 6581  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-004-Q1-E1-C10  
  
<400> 6581

ctcaacaacc aacgcgaaca acggaaagaa gatggcgcaa tccgtcctcc ggttcctcca 60  
acaaaggtag aatgcaatcc gctcccccaa gaaaggccgt taatttaaca atccgctggc 120  
aacggaaagc caacctcccg taaattcctc gccgtccttg ctggccactt tcgacagcct 180  
tgacatcttg gacgcctgca atggcctcct gctctgccgc tgctggaagg ctgctgatcc 240  
cctggaattg gattatgttg tttgcaatcc caccactgag aaaatgggtg ccttcctctg 300  
catcgactgg tccagcaaag tgagcgctgc tcgcctcgga tttgaccggg ccgttacttc 360  
ccacttccat gtattcgagt tcatag 386

<210> 6582  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-004-Q1-E1-C12

<400> 6582

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tggaatggct aacgggggggt aatggttaac cggaatcaa taaggaattg gtgacaaaaa  120
aaccattaaa ggcattagaa ttacctaagg agcaaaacca aaccttgtgg aggatcccat  180
caaccctatt ctgcacatt gcttcgatg cgacgcttaa gccattgggc cactttgctg  240
aagcacccaa tgctcatagt tatccgcta tatgtgccg ggagtatgtg gaacaagagc  300
tctcgcgcat caatctgaaa gggaagggtt cactttangt gcacacagac cgccgattaa  360
tctggtgact tggtgactcg ttggtctgcc ttctatggtc agaatgcgaa ttgcgataat  420
ccaagctgat                                     430
  
```

<210> 6583  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-C2

<400> 6583

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gggccgaccg gaaccaagg ggatecacta aaacctttgg gccaaaaaag tttgccccaa   60
tggctcaact aaaaatttta aaacaacggc gggggtttaa tttgccaaaa ccaatggtcc  120
cccaagcctc aactaaaata atttgagagt cttttaaaac aacaatggaa ttgctaaggt  180
ttaaaaattg ggcccagaat gatgggcatc caagtttgggt ataataaaaa ctatcataga  240
aagtgaattg gatgctatga tcaatttgat gcttgataac tgttttgaga tataaaagtg  300
gtcatgttag agtcatgcta gttgggtaat tatgaatttg agaaataccc gtgttgaagt  360
tggcaagtcc catagcatgc acgtatggta aaagttgtgt aataaattta ttgcatgggg  420
tgctcttttg attg                                     434
  
```

<210> 6584

<211> 442  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-C9

<400> 6584

```

gggtaccagtc tagaatcccg ggccgacggg cggttggagc caccaaccgg gactaaaggg 60
cctcctgtct gtactcgag caccggccac gtggaggccc atctgtcccg gttagtataa 120
gaaccgggac gaaaggccta ggcattggta acgacccttt agtcccgggt cccaaccgg 180
gacagatggg ccttatgaac cgggacaaat gacccttttt ctactagtgt taaaagcca 240
gtaggtcaca ctgaattttt gatgtgatat ggccacagct atcatgttgt aatatcttct 300
aacctgaaca cgatttatac aacttgaatt taaaatgtta cattaacgga tacaaaaatt 360
agctgatatt ccctgtaatt ttctcttttc tttccaaaaa gggtgtatgt ttgcaagcac 420
ttctgcttat tattaactgg ta 442

```

<210> 6585  
 <211> 358  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D11

<400> 6585

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tccaacccca caaaaccgga cccggcaacc ccgaacctgc cttaaggctt aaaaggccaa 120
ccaccggatg aaggagaact ttttcaagga aaccttaaaa ttgaaaaaaaa tggactttta 180
gggtggatca aaaaggtagg aacctccggc aaaattgcta ctgcaatttg gcagctttgg 240
ggtttgcggc ttacttacac tgctgtttgt gtctctgact ttttctgctc tgagtttaac 300
acaaaaaata tgggtgctgc tagtgctcac tggactcgca gctagcgtcc gttgccat 358

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<210> 6586  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D2

<400> 6586

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gcacggactt caagcacggc gcgaacatgg cgatcacggg cgcgacggcc atggacgcgc 120  
ccttcttccg cggcctcggc ctgtcggaca agatctggaa caacggggccc atcagcttcc 180  
aatccagtg gttccagcag atcaccgcca ccgtgtgcgg gaacgactgc atgcggtacc 240  
tgcgggactc gctggtggtg ttcggcgagt tcggcgggaa cgactacaac gcgatgctgt 300  
tcggcaacta caaccggac caagcgagca ggtaccaatg tttcaacggt tcgaacggag 360  
tgccgctagc taaatgaaat cctgtccgcg ctatagcctg atttttcacc ggcatatagc 420  
cgatttggat gagtagtacc gctact 446

<210> 6587

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D4

<400> 6587

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agatcaaggg accacaaccg tgaccgctac aaaaaccgga cccgtgacag aaagaggccc 120  
tattaccagg gaggtagagg gtcggactat ataggcgggt cctataacag ccggagggat 180  
tctgaaaggg caaggcccac agacaggaac ggtggtgatt tttcaagaac aggagaccg 240  
gggaggatga ggagcaggtc tcggtctccg ggcattcatg gttattaatc atttcaagtt 300  
atatgagact cgtgaggtaa acattatgct cctttgttta ttcattcagt cgcaatgtct 360  
gggtgttgtc atgattaaat ttaaacctta ctctgctcta gcagctcttt gttgaaacca 420  
tacct 425

<210> 6588

<211> 238

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-D6

<400> 6588



ccggccgacg gggaaaacaa tgaccgtccg tacgacgacg aaggatagca ctacagcggc 60  
caccgggatg accatgagga gagatccata gatcagcacc gtcagtgtg taatcaccgg 120  
atgcctgtca cgctgatgtc cgattcacct tgaggtacag ggtcgcactc tectggctgt 180  
tcctatcact gcctgatgga ttctcatggg gcaacgctca aagacacgac cggttgtg 238

<210> 6589  
<211> 308  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-004-Q1-E1-D9  
<400> 6589

ttgagaaacg aatgaccgag acatagtttt tcagaagcgc tagcacctta cgatcgggta 60  
gacagttaca cctactttcc cctacatctg ctagtctacc actgtaagag ttcacatgac 120  
ttaatcaact atgctagatc ccatagtagc ttgcggctgc acacggaagt ttctagcatg 180  
aataatttca tgatcccttt gagcctgggt ggcggtccat aaagaaaacg accaatcgct 240  
ggaataccca ggtgcctcaa tccaccaga tgtgtgttaa agttgccacc ttaaataaac 300  
tattaaat 308

<210> 6590  
<211> 319  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-004-Q1-E1-E10  
<400> 6590

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ctcagaagag aagtccagct gcgggcaaac ccaagatttc caagattaag aaaccaaag 120  
atgaatatga tgatacaaag gaggaaaaga aaataaagaa ggaagttggt atcaagaaag 180  
atgaaaagaa ggctgctggg gtgaagaaag anggggctgc tggggtgaag aaggagagga 240  
aggtgtatga attgccaggg cagaaacatg atcctcctcc tgaaagggat ccattgagga 300  
tattttatga atcgctcta 319

<210> 6591  
 <211> 314  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E11

<400> 6591

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ccgggtcgac aagaagaatt ctgcaatgct tgtgaggata acgagtgtta gaatgcgaga    60
ttcgctaaac catgtacaag gaaatgattt ggggtgcggga tggattgatc accataccga   120
cttactctta ttattcgctt tgctatatgg gatggtaaata ctgagtgact tacctatagt   180
ggagagacga cgatcaaaac cttgtttgaa ccttaaaaag gtacaggtat tttttttccc   240
ttgtacacgg cagttgttgc caaccgtagg ttaaacgggtg aggttcaacc caaacccctt   300
cctgcaggag aaac                                                    314
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<210> 6592  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E12

<400> 6592

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ggggccgaccg ggcttggttag gtatggtttg gagggtccta acaaggggtcc tctgtgggg    60
aattccccgg gaaaatgggg gcttttctcc aatccttggg gccttggggtt aaccggaaaa   120
acccggaatg gattgccggc acaattggcg ggaatttttg cagtagtccc tttcgtgctc   180
aagggcaaaa gaatgctgcc gttctttttt ttgagagcga atgcgtcctt tctggtgacg   240
ctgggaactg ggaagtcgtc aatccagatt cttaacggcc ttattctgtc atgctggaag   300
tcggcaatcc aaaccacat gttcctcacc atatttgtca tgtccatagt tgtactatat   360
acagttcatc catgtgaata acacaatcga ttatcctaaa aaaaaaaaaa gaagaaagga   420
gaaaacg                                                    427
```

<210> 6593  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E2

<400> 6593

cggggtccgac ggggtgacaac gtgaccttgc aggtgactcg ggaccgcaaa atgacaaact 60

ggccaaatcc caaggtcggc ccggttaggc ccccaggttc cccaagacca caggaggaag 120

ggtggtggct ggtggtcggc gacagctcca ccaagcagct gctggctatc aagaggggtca 180

ccctccagaa gatggcccggt gtgaagctcg agttcaccgc cgccgcgag ccagggacga 240

aggactacat gatctacctg atgtcggact cgtacctcgg ctgcgaccag gagtacgagt 300

tcaccatcga catcaaggaa gctggaggcg actaatttca aacacccaaa actctttttt 360

atactgggtt tttgctctta ttagacaat attatgtgac ctggaactta tcatcttttt 420

gtctgtaatg taacacctga 440

<210> 6594

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-E9

<400> 6594

aacgggttcc acaaaaaaca tcaagttaag attggcaagt tcaaaacccc gaaaattgga 60

catcctaata aagctaata accatctctg gaacttcaca acaccaacaa atggaagcaa 120

gcaggacgaa acctacactg agcaacctgg agtctttcca tgttggcaag caccacaatt 180

tccgtgtacc gacctgccag cgaagccccg gcacagcaag tatccctggc acagcaagca 240

ccgattagca ttcaggcatg agtaaccaag tgtgtccgag cccaggagcc caaatggccc 300

tgcgcaccga gagcccatga gcccaaattg cctgcgcac cgagagcagc ccggactgta 360

tgttcacagc cagaaactat tatactggaa ctcaattgcc aacaaacctc ccaagaacaa 420

aa 422

<210> 6595

<211> 205

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-F1

<400> 6595

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 tgataaaciaa gccaatggtc cccctagccc aacaaaaagc tctgctttgt ttaagtcggg 120  
 ccagacataa atgggcctcc ccaaagaagt tacgaacaga ccatagtgtg agaaatccta 180  
 taaagtttct ttattttaacc tgcg 205

<210> 6596  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-004-Q1-E1-F11  
 <400> 6596

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 ggaggagaca tgtgtcggag tcccgggtgac cagcaagcga agagccgatg ggacagcgtc 120  
 gtctgtgcgc cgcgaccacc tagcggggag gagctagatc ggggaagggtg ccgtcgccag 180  
 gtggtcgagg aatcgggcag caaagtgccg aaaaaaacgt ggagctggag aggccttgg 240  
 ggaggaggaa acttacattc taatgcatga ggccgggga gggagggtgct gagcggttat 300  
 gatcggcggt aggatcctgc gccatgtgcg atggtgggta ggacccttcc tttccttttt 360  
 tgtatgacag ctggcaaaag gtgcgggaca ccgctgccat atttaggtgt gtgctccgga 420  
 acgcta 426

<210> 6597  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-004-Q1-E1-F4  
 <400> 6597

cgggccgacc ggaagggttaa aaacctgatt ggaaggatat tgaattggct gaagcccgg 60  
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 aacccgacgc actaccggga gccgaggttc tacaccaagg tgtttaagga atgccactcc 180  
 tatgaccaag aggggaattc ctttgagctt tctctggtaa cttccaagtg cattggagct 240

tatgtgaaaa gcaagaagaa ccagaaccag atatgttggc tgtgggagaa ggtcaagtgc 300  
acagaagaca aaggctttca gagattcctg gacaatgtgc agtacaaatc cactggaatc 360  
ttgcgttatg agcgcgtgtt tggggaaggt tatgttagca ccggtggatt cgagaccaca 420  
nangagtttg tggacaagct ggacct 446

<210> 6598

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-F6

<400> 6598

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aggctcgcgt ctctagcaca gtctagccta ggaccagcac agtaccgtcg ttgagcgttt 120  
attcaacttt gcatttctga attgattatt gctgaccatt ttgctacca tattataagc 180  
cttcccagct ccacatacat ctacgtcgtg cggttgactc tccctagtaa tcgctctatc 240  
caagctttga gagtttttga ctacaacgat tgccgatcac cgcttgcgtgc tgggtaagaa 300  
ctggtgaagaa tttgagattt gcttgacgga tttgtgacac ccaccaccac ctcttggttag 360  
tagtctgtag gattatattc ttgtgtgtct ctattgctgc taaccatg 408

<210> 6599

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-F9

<400> 6599

ccgggtcaac ggggaaggcg aagatgtctt ggaaaactta cttgaacaac cacctgattt 60  
ccaacatcaa gggcaacaac ctgcctccg ccgcaatcct cggcaacaac ggcaccttct 120  
gggccc aaag cgccgatttc ccgtcgttca agccggcgga aatggccaac atcatgaagg 180  
acttcgacga gccggggacc ctgccccga ccgggctgct actcgagac gccaagtaca 240  
tggtcatcca aagtgaacct ggcgccgtca tccgcggcaa gaacggcgcg ggaggcatca 300  
ccctgaagaa gaccgggcag gcgctggtgg tccgcatcta cgacgagccc atgacccccg 360

ggcagtgcaa cctgggtggtg gagaggctgg gcgactacct ggtagagcag ggcattg 416

<210> 6600  
<211> 362  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-004-Q1-E1-G10  
  
<400> 6600

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ctactgctaa atgacctacc attaccgcct ttcacaaaga acccactact gctagggtgtc 120  
agcatgtaaa attagacatc anaaatacat tcatcatcaa tgatcctttt gtgtagaatc 180  
tgaattgtca atatgaatcc tctactgggtt aagaaccggg gaggattcct attgcgggca 240  
cagatcctac acatagagtt caatgaacac tactangaaa aggccctgcta gtggcgccacc 300  
tgttttggct actaatggcg cactacangt gcgccactag catcacgcca ttagaatttt 360  
ta 362

<210> 6601  
<211> 198  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-004-Q1-E1-G11  
  
<400> 6601

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caatgcaaaa cttatctggg accgaatctc cgacgtctat gaagggttatc caaacagtca 120  
tgatccttgg tttgaagact tcaangaatc tctcaaaacg atgactttcg aaccagaatc 180  
atcatcttct gcatcatg 198

<210> 6602  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-004-Q1-E1-G2

<400> 6602

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tgctacagac tattttggtt ttgacatatt ctgtttttcg tgtgttggtt gcttattttg 180  
atgcatctat ggctagtaaa atagtttata aaccatagag aagttggaat aaagtacctt 240  
taacacaaat ataaataaag aatgagttca ttacagtacc ttatgtggtg gttttgtttt 300  
ctttcactaa cggagcttat aagatttcct gttgagtttt gtgctgtgaa gttttcatat 360  
tttgggtaaa gctttgatgg actatggaat aaggagtgcc aagagcctaa gcttgggggtt 420  
gctcaatgca cccaagatat tcacatcaatag ca 452

<210> 6603

<211> 347

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-004-Q1-E1-G3

<400> 6603

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tctcacattg acgaggataa tcaatgagct atggagatgt ccatcaattg atgtcaacat 120  
gaggagtang gattgccatg caacggatgc actagagcta taaatatatg aatgetcaac 180  
aaaagaaact agtgggtgtg catccaactt gcttgctcac gaagacctag ggaattttga 240  
ngaagcccat tgtacgaata tacaagccaa gttctataat gaaaaattcc cactagtata 300  
tgaaagtgac aacataaaaag actttctata tgaagaacat ggtgcta 347

<210> 6604

<211> 286

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-G4

<400> 6604

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ctaataccca ttgcacgtg ttgcagtaac gtagtttttt tcgacgcaga gtaacgtact 120

tcttgatggt ctttttttct gatcgacaag cttttctatg gtagctatat gttcatcttg 180  
atctgtgctt cttttacttt acatcattta ttagctttgt gatctccttt tgtcattgtt 240  
gagatattgt ttagtgctaa aaacaaaagg aaatttgagg aagacc 286

<210> 6605  
<211> 309  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-004-Q1-E1-G8  
<400> 6605

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tgccacactt tgtaatgcaa ttttttttgt cacatcggtc atataatcag gattctagcc 120  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaca 180  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaaaaatagg cggtagaaaa 240  
agattaaaac taaactttca cgtgcatcaa aggtcaaagc ccatacaaaa tggtagccata 300  
ctttcatctt 309

<210> 6606  
<211> 380  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-004-Q1-E1-H10  
<400> 6606

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gaaccgagac aacatctgca gcttcatctc ggagaccaac cccgggacag tgcggtcgtg 120  
ggagaccaag gacagccagc tgacgatggt ggcggacgac ctgaagccgc gggcgggtgt 180  
gacgtgcccg gagaagaaga tgatccagca ggtggtgttc gccagctacg ggaacccgct 240  
gggatctgct ggcaactaca cgtttggcaa ctgccacag cccaaggcca aggagattgt 300  
ggataaggcg tgcgtgggga agaggagctg cgtgctggcc gtgtcgacag aggtgtacgg 360  
cggggacctc aactgcccg 380



<210> 6607  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-H12

<400> 6607

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 caagtggaca ataaccggga aatggggaca agttttcaaa atccaggaca attttttaac 120  
 ccctggacgg aattggaatc cgggaaaatt ttcaaattcg gaaacaaatt taaggcaatt 180  
 caaacatttt ccaaaaacaa ggacaattac tgaatttaag aacaatttaa accgattggt 240  
 aacacttttt aaacaatgtc acaagaataa catatttatt aaatgaaaaa aaatagaata 300  
 gatgaacatt tttttagaag tttctggaac aaaattttta attctcaaac atttttttat 360  
 ttaatacaaa ttttttgaaa tgc 383

<210> 6608  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-004-Q1-E1-H4

<400> 6608

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 ggcttattac caagggcggt atccggcccc tcttcataaa gaccgaatac cttagggagt 180  
 gttcggcgtc tcgagttagg gcttatatgc atcagctctg aatcatgtct tcggtcaaatt 240  
 gttggggttg cccgactcct gtgttttgct gccttacggt ccgctctatc ggctaagacg 300  
 acaccagaag aactactgcg attgtgcccc gggtcgtcca ggcgagcacc ttagtagaga 360  
 aagccgaaaa ctgactatca tgatat 386

<210> 6609  
 <211> 264  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-A11

<400> 6609

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aagatgcatt tgtctgaata atttatcttg taggggaaat agtctacttg tggcatgtcc 180  
atctttcaaa agttggctta ggggtgtgagg tagcttctta gccatttgcc ttcccagcag 240  
ttgtaccgca tgaatgtcga ttgg 264

<210> 6610

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-A2

<400> 6610

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gttccgcagt tcgtgtgttg cttatattat atgttgctat tatattacca ttattaagtg 120  
agggaggaat tgattagtgc cagtgtttga ttttgttctg tttgtcatgg tacgaggaaa 180  
gatcaccaag tagataaggt ctctagtagc agtttggtcg tacctaataca gtacccttat 240  
ttcattccga ctagtaagta aaaacttgtt tttccaaaaa aaaaaaaaaa aaaaaaaga 300  
aaaaaaaaaa agaaaaaaaa aaaaaaagaa 330

<210> 6611

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-A3

<400> 6611

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cgggagcaga ggggcttcgg ttaagaaata aataaagagg atcgggtgctc caccgtgctg 120  
cggccgtgtg gtgttgggtg tgattgtttg cttgttgacg tggctgcatt cactggctgg 180  
gcaccaggat ccgtaagata agataaatgt gtacgtacgt gctgtattcc tgaacttgta 240  
ctgtgacgag cgagactcgc tttgtaacgt gctattctgt ttctacgtgg ctttcttcta 300

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa cggccgct 358

<210> 6612  
<211> 388  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-A4

<400> 6612

cgggctcgacg gggaaacgca ccggacttgc gagatatatt ggaggataag gcaagacaat 60  
caagatcgat ctatggatcg cgtgggcgcc ccatgatagc cgacgacaac cgtcgcgccg 120  
gacacagtaa gtctggccgg gccgaacaaa atagacacat ctcttttgag ctctgtcatg 180  
atatcgccca gtacagaggc gccgcacacc cactatgctt cacagatgaa gtaatggatc 240  
atcaaatccc caaagggttt aaaccctga atattgaatc ttacgatggc acaacagacc 300  
ccgcggtttg gatcgaagac tatctctcc acatccaaat ggcccgcggt gacaatcttc 360  
acgccatcga atatctccca ctcaaact 388

<210> 6613  
<211> 263  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-A5

<400> 6613

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gaagaccaag gccagggaaa ggcttatcgc aaaggaggct gcgcagcgga tgaactaagt 120  
ttagcattgt tgaaccatat ctattctca tccttgagta gtgtgcaagc atactgtggc 180  
agtttggtc cagttttgaa agtcattttt gtttgtctga aacatcttgg aaagaacagt 240  
gtaagaatga agtatttctg ttt 263

<210> 6614  
<211> 430  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B1

<400> 6614

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ggcttcatcg acttcagcga gttcatctcc ttctgcaacg ccaaccccg gctcatgaag 120  
gacgtcgcca aggtcttctg aatcagttca tttcacctca gccgtccgat ccaggagccg 180  
atccatctac gtacggcttc gtatatcaat ttcattgcaac tacctactcc ggtcccgatc 240  
cagcctcagc ttcacctgag gccggcccta attttgtttg atcatttttt ttgctaccag 300  
tagtaactag tgatgatcac tgttccatca tttatttatt ttatatcadc acatgtttct 360  
tttctttctc tacctttttg tcgatcgctg gctccagctc gatccaacga ttcattgtgc 420  
taattggttg 430

<210> 6615

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B10

<400> 6615

gggtcgacgg ccaacacgta gtagaaggca cctccggtgt agtagaagtc atcgtcgaag 60  
gtggtgtctg gtcctctggc tccaacatct gggtgcgaca accaggtaga agggataggg 120  
ggaaaagagg gagaaagcaa ccgtgagtac tcatccaaag tactcgcaag caaggagcta 180  
cactacatat gcatgcattg gtatcaactg gaataaagct atcatatgtg gactgaactg 240  
cagaatgccg gaataagaga gggatagcta gtcctttcga agactacgct tctggcagcc 300  
tccgtcttgc agcatgtaga agagagtaga ctgaagtcct ccaagtatca tcacgtagca 360  
taatcctatc cgatgatcct ccctcgctg cctgtgaga gagcga 406

<210> 6616

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B7

<400> 6616

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aactcaaggc ggcgactgcc atcgggtcaag tgtgggtcat cgaggctgct cgctgtgttt 120  
 cgtcgcagct gcaggccgcg agatcagggtc gggaaggcgc cgcgcatga cgagtgagcc 180  
 aattttcgga ttggaccata acaacgtgtt tcgggtctccg acgtctagaa gtagtggttaa 240  
 agttttgaat ttgtatggca agaaccactt acgtaggtag ctgacacgca cgacagtgtg 300  
 ttacactct tacttatgta aaagatatga attatacatg agttgcctcc acaatgagga 360  
 attgcgatag tagatatggc aattatgtga tagaaaaaaa accaaaccgg ggaaccggcg 420  
 ccac 424

<210> 6617  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-B9

<400> 6617

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 ggcgagagtg ccattgtctt cttacacttg ccggtggagc tcgatgggtgc gtccttgatg 180  
 gtagcgcagc actccgaaga ggtgcgcttg ccggagtggg catcagaact ctttccggac 240  
 ttggtattct tcttcgcccc gggagcttca acggcaagtg acttgcgatc tgttgagct 300  
 gctgcttctc ggtagatctt gtcggcgcag ataagagcat ctttcttgtc gccagggaca 360  
 gaggtgacac ttatcgggcc tggcatcttc agtatgttgt atgcatagtg ag 412

<210> 6618  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-C11

<400> 6618

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 gaccaatggc agaaaccgca gcgatagcac caccaccaca accaatggca ccaccgcaac 120  
 cagtggagga aaacgcaacg gcggcaccgt cacaaccaat ggcaccaccg caaccaatgg 180

cggaaaacgc aacggcagca ccaccgcaac caatggcgga aagcgcaact gtcgttgtgg 240  
 tgggtgccacc accaccgcca gacggcacca cgacattcct ctgcctcatc ctgccttct 300  
 tcateccctcc cctcggcggtt ttcctcaagt acaaagtga gattgaattc tggatctgcc 360  
 tcatecctaac attcttggcc tacgcgccgg gcatcatc 398

<210> 6619  
 <211> 176  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-C5

<400> 6619

ggaagaatag gaggaggaag aagacgatga agaagaagac gaagaagaag aagaacgaag 60  
 aagaagaaga ggaagaggaa gaatcagcag cagtatacga acacgaagac gaccaagagg 120  
 aagcagagga acacgacgaa gaagaccacg aagaacaaga cgaagccctc cacgaa 176

<210> 6620  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-C9

<400> 6620

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 cacgtgggat agaggtccca cttgccaaat gtgggaagtc tcagcttctt cacggccgtc 120  
 acgccatgac tggattttta agccgcgtgg cgcaggtaca tgcacaatcg tgcgccggtg 180  
 aacaccgatg aaccatggtc acggcaaggc taaccacgca tccattaata gcatccatcg 240  
 ctccctccca attaccaatg cagtcatttg aatggcctca cgacttcac ccttcctaga 300  
 aaagccctat ggcgaggtgt ccccatcacc gaagtcagtg ctggagcccg acgacccgat 360  
 tgatgccgtg tcacggatat ccgctatcga 390

<210> 6621  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D1

<400> 6621

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tacagtcttt tgggtggcgt acattttaga gacaaaagag ttataatgac tgaagggtcc 120  
tttgacagtg atagcagcag aggatcatca cccacctat cacctcacct atctagagga 180  
gatactgata caaacaggtt gtccaagata aagctcgggt cgaacatgcc aacaaaagct 240  
ggattgacaa ttcgaaagag tgattgtgaa ccacagctta ttggagaacc taccggggag 300  
ttgtacgatg ttatattgta ctttgggatt atagacatac ttcaggacta tgatatcagc 360  
aaaaagcttg agcatgcata caagtcttcc caatatgacc caacgtctat ttcagcagta 420  
gattcaaaac tg 432

<210> 6622

<211> 311

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-D3

<400> 6622

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cgggtgagtca gtcactttgc tcaatttagt tttgcttgat gtttgaataa agtaccttga 120  
tccgaaatta ttaagtgtta gagagtcttc acatgggtcgt cacaaatggt cgactactca 180  
ttgatcgta cttagactct catcgacta ctttattgtc gctcaaatgc aacacataga 240  
tcgtcgtata tcatgggtcgt aactggaata tgccgagatt tatcaactgt aatgtctcag 300  
ctacatatcc c 311

<210> 6623

<211> 427

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-005-Q1-E1-D4

<400> 6623

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 cgggaacccg aacgtgtacg cgagcctcct tggggttctg tgggtcttcg tggcaaacag 120  
 gtggcacctg gagatgccag acattataga tggctcgatt tcgatcatgt caaggaccgg 180  
 ccttgggatc ggaatgttta acacgggcct gttcataggt ctacaggaca agctcgtcgt 240  
 gtgccggcct ggacttacgg cgttgggcgt ggcgatgagg ttcgtcgctg ctccggcagc 300  
 caccgcggtc ggagcgctac ttttgggact gcgtggtgac cttntgcgtg ttgccatctt 360  
 acaggctgca ctgcctcagt ctgtcggagc atttatcttc gcgctagagt atgacctgca 420  
 cgctgat 427

<210> 6624  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-D9  
 <400> 6624

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 aaaaaggacc ttcgaaatcc aattttatgt gtagcgcaaa ggagttgcga ttcctttctta 120  
 ttcctataga acatctagta acaagaatat gaaatcgtaa atagcgaaaa attcttgtct 180  
 tgcgcggtct aagtctaagg aaataaaaaa attcgcttat acaatttcat ctacatcgaa 240  
 tttatatatc agaatagcgg atagaggcat cattaaagga gtcaggctta cttactttat 300  
 gcttctttcc aattttatgg tggatttgat aagaaccctt atcgctttct tgataaataa 360  
 tcgacaaaaa aagcgttttt tttatataac ctgcttggtt t 401

<210> 6625  
 <211> 349  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-E12  
 <400> 6625

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 tcgtctgtat gtattccatc tgtgtaagtt aattcatttg ggtgattggg tcggctgtag 120



gcggtatatac tcaacacagt gggggatttg taatgtttct ggttttgtgt tccttgtag 180  
atgaaataat aacttaactt gtttataaca tgctcctcaa ttttcttcct aacaaaaaat 240  
aaataattac aaaaaaaaaa aaaaaaaaaa aaacaaaaat ataagaaaaa actaaaaata 300  
aaaaaaaaaa attaaaaaaa aaagaaaccc taaagtttca acgaattaa 349

<210> 6626  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-005-Q1-E1-E2  
<400> 6626

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aacttcaaac aaagtgaacc aacttcaata agattgatag caactactca tacaagtgcc 120  
tagagcatat atcaagcatt agaactactt ggaaccatat atatttgaca tgcaagctca 180  
agaacatggt cactgtcggg gtcaaaaccg gcggatctcg ggtagggggg cncgaactgt 240  
gcgtctaggc tggatgataa caggaggcag ggaacacgat gttttaccca ggttcggggc 300  
ctcttgatgg aggtaaaacc ctacatcctg cttgattaat attgatgata tgggtagtac 360  
aagagtagat cttacacgag atcaaggagg ctaaacccta naagctagcc tatggtatga 420  
ttgttgatgt g 431

<210> 6627  
<211> 359  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-E3  
<400> 6627

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aaatctcgtt tttatctagt cctttcctgt caaacctcg ccgtcgctag gcagccagca 120  
tcagcaatag tactactact actactagtg ccatttccgc cctgctctt tcagctattt 180  
ccttttctcct ccataaacc cttgcctttt agctaaaaac ttaaatgttt aagttaaaaa 240  
aaaaaaaaa aaaaaaaaaa aaaaaaaac aaaaagaaaa aaacaaaaat aaaaaataaa 300

agaaacagga taaaccggaa gctctagagg tttaaagcta atctgcatgt gaatgaaac 359

<210> 6628

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-E9

<400> 6628

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attatatcaa ggatcactat gtcaattcgt gctgtcattc attccacatc gataattaag 120  
acgatcatac tgacatgatg cacgaattct ttatagatgt ttctcatatt ctgtacaaaa 180  
tgtattcaca tttaatgggt cgatcaaggg ttgtcatgta atgaatcgtc caaggaaaca 240  
gtgcatttga tgcttataga cgacaatttt gctccattaa tcctatttga ggatatcttt 300  
tgctgggtatt tcgagatgtg aaaaattgtg tatgatcgac tctacaatgg tatccagccg 360  
tatgatgact atttcat 377

<210> 6629

<211> 363

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-F12

<400> 6629

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gcggcgacgc caagaaggaa ggcgggcgacg gcggcgacgg caagaaggac ggcgatggga 120  
agaaggacgg cgacgggaag aaggacggcg agaagaagga ggagggcgac ggcaagaagg 180  
acggcgggcg gaagaaggac ggcgacaaga aagaggaggg cgacggcaag aaggacgacc 240  
agaagaagcc cgccgccgtg gccccgctgc cgttcccga ccacatgccg ctgccgcacc 300  
acatgccgcc gccctacatg ttcaacgccg actacatgat gaaccagtac cggccggcgc 360  
cgc 363

<210> 6630

<211> 421

<212> DNA  
 <213> *Triticum aestivum*

<223> Clone ID: LIB104-005-Q1-E1-F4

<400> 6630

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 aaatcttaac tttagtggca tcttcgattt ccagatttgt ttataattgt ccatttgaaa 180  
 atgttgaata agtattatat atgttgaaga agtatttgaa aatgttgaat aaatattaaa 240  
 aatgttgaac aagtatttga aaaatgttga ataagcatta aaatgttgaa caagtatgta 300  
 aaaattgttg aatatgtgtt cggacaatgt cgaacgtgta tacaaaaaat gtttgatcac 360  
 ttattaaaaa atgttttttg acatataaga aaaatgcagc gaaaacgaaa acaagcataa 420  
 g 421

<210> 6631  
 <211> 67  
 <212> DNA  
 <213> *Triticum aestivum*

<223> Clone ID: LIB104-005-Q1-E1-F6

<400> 6631

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 tgagata 67

<210> 6632  
 <211> 366  
 <212> DNA  
 <213> *Triticum aestivum*

<223> Clone ID: LIB104-005-Q1-E1-G1

<400> 6632

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 aacacgaaca catttgggtc tgcagccggt ggaccacttc aggttcctcc actccaacct 120  
 gggtcctcag ccaggacgct cctagctatg gttttctccc agaatgtctc ccctggagca 180  
 ccaaacttgc tactgcaggt tgcagtgaag aataatcagc aacctgtgtg gtatttcagt 240

gacaaagggt cgctccatgt cttctttggt gaacatggca aaatggatcg aacgggtttt 300  
 ctcgaggcct ggaaatcttt acctgatgac aatgaatttt caaaagaata cgccacgttc 360  
 tgtcat 366

<210> 6633  
 <211> 395  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-G10  
 <400> 6633

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 gcgatataaa ggtggtgata ttagagtcgt gctagttgag taattgtgaa attgagaagt 120  
 acttgtgttg aggtttgcaa gtctcgtagc atgcacgtat ggtaaacgtt gtgtgacaaa 180  
 tttgaagcat ggggtgttct ttgattgctt tccttatgag tggcggtcgg cgacgagcga 240  
 tgggtcttttc ctaccaatct atccccctag gggcatgctg agtagtactt tgcttcgagg 300  
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 atacgcactc tcacccttcc atcattgcta gcctc 395

<210> 6634  
 <211> 315  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-005-Q1-E1-G11  
 <400> 6634

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 ctccgccatc atctaaatcg tgcctctcgt cttcagcgtc atcgtggacg ccgtcggctg 120  
 ctgtgccttc aggaacaagc gccgctagct atacaacggt ggcggatagt gggatcaagg 180  
 cgcgtacgcg tgatcgcgcg cttgtctcgg ttatttaatg cttggtttgg atggatgcga 240  
 tgggtctcttc gtgtcattca tcttcgttgg cgttggttct cttacgatgg tctgggtctag 300  
 ctttgtgcat gcgag 315

<210> 6635  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-G12

<400> 6635

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gcttccacgc atcagcttat ctgtagcttc ataagggagc tagaatacat gccgggcaac  180
cagcatggtt ttatgaagat ccatgtagac gctagcattg caaggaatca gaacaagggc  240
gctgctgcag ccgtctgcag agatggcgat ggaaatttca tgggaaattc ttcattagtg  300
atztatggaa ttaatgatgc tgcaacaacg gaagctatcg catgtcgtga ggccctttca  360
ttggtggatg atttgatggt acaaagcttc gtaatagcat cggactcgaa g           411
  
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<210> 6636  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-005-Q1-E1-G2

<400> 6636

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aaagtatgca agctccagcg atccatttat gggctggtgc aagcatctcg gagttggaac  120
attcgctttg atgagatgat caaagcattt gggtttatgc agacttatgg agaagcccgc  180
gtttacaaga aagtgagtgg gagctctgta gcatttctca tattctatgt agatgacata  240
ctcttgatgg gaaatgatat agaacttttg gacaacatta aggcctactt gaacaaatgt  300
ttttcaatga aggaccttgg agaagctgct tacatattag gcatcaagat ctatanggat  360
agatcgagat gcctcatang tctttcacia agcacatacc ttgataaga           409
  
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<210> 6637  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-G3

<400> 6637

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ggcatatttt catcagggaa tcgtgcttcc accagtctgg ggattccaag aggaaagtga 120  
acccgacgca ctaccgggag ccgaggttct acaccaaggt gtttaaggaa tgccactcct 180  
atgaccaaga ggggaattcc tttgagcttt ctctggtaac ttccaagtgc attggagctt 240  
atgtgaaaag caagaagaac cagaaccaga tatgttggtt gtgggagaag gtcaagtgca 300  
cagaagacaa aggttttcag agattcctgg acaatgtgca gtacaaatcc actggaatct 360  
tgcgttatga gcgcgtgttt ggggaggggtt atg 393

<210> 6638

<211> 425

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-005-Q1-E1-G4

<400> 6638

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cgggtgtcgcg acgtccgggt ggaatcttag gagagtttag ctccattttt attagggatg 120  
agttaagttt agttcgtgtg ccagtcttaa taaaaatcaa gcatctgtat aattaaggag 180  
gctactgatt gttgtagcct tcacctgcaa tttatccgag ctttgaatga atggacttgt 240  
gttcggaaaa agaaaaatac agtgctgctg gcttagagta gagtttggtt tctagtcgta 300  
taatgcaatg tttacttata tcttgctctt agtttcatca tcagtaatga ttttattcct 360  
cttggcggtc gcatcaggca tgnnttaata agatcgtatt ttatgggaag gagggagtag 420  
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<210> 6639

<211> 233

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-G6

<400> 6639

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tactatatgg atttatgtgg catttttagca agaccacact tggatcatgta ttccgtagtc 120  
cagtttaggt tcatcgactc aaatgtgggt tctcaaggaa gattctctta acggtgggta 180  
tctatcatgg tgtcacgcat gtcgaagtaa acttggtcat tgatgttgca cat 233

<210> 6640  
<211> 416  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-G8

<400> 6640

gacgggcccag tcgagcgcca cgccacgaaa ttgtcgatgg gatccacctt cctctctcca 60  
cctcccactg acagtgccgc caatccatga gatccagtc tggcgccctc ctctattcat 120  
cgccttgccct tgggaccctg caagatccat ggcataggat cctgaccacc agcgccacga 180  
gtcatgggga gatcctccct cggcttctgc ggcaccggcg agatcctccc cagcttatac 240  
ggcagtggcc ttctcctccc atggtggcct gaggaggagg ctccacctac cctgggtccg 300  
ctccaccacc acgacttgca tagctagatc accgcacggg ctgccatcag gcgaccacct 360  
ctctgtctcca gcgcattggg tcaccgttcc ccatgtgtgt gctcctgtt gacct 416

<210> 6641  
<211> 409  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-G9

<400> 6641

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gagacggacg ctaggcgact ccagcacaag aatgtgatgg cgctttggct cgggatcgag 120  
gtgtcgaagc gccttgcgag ggagaatgag attgctaaga ccagggcaga gcaccacacg 180  
aaggagtggg accgcgccat ccagcgctc tccgggtaca tctcctcgac gtcggacatc 240  
agcagcaccg gcacgaaaaa tgacgatgag gatcctccct ccgaggacgc ctacacacag 300  
cagatgtacc accgtccgg atactgcaaa ggcaagggcc cagacaagaa atggtgatct 360

ctgccccctc tagctaatat agtttgtatc cagtaatcta tcttgcaaa 409

<210> 6642  
<211> 372  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-H1

<400> 6642

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ttgagcatag ttatgagaat atctaggtat gatcatgtat ataggcatca cgtccgagac 120  
aagtagaccg actcctgcct gcatctacta ctattactcc actcatcgac cgctatccag 180  
catgcatcta gagtattaag ttaaaaacag agtaacgcct taagcaagat gacatgatgt 240  
agagggatag acgcatgcaa tatgaagaaa accccatctt gttatcctcg atagcaacaa 300  
tacaatacgt gccttgcctgc cttactatc accgggaaag gacaccgcaa gattgaaccc 360  
aaagctaagc ac 372

<210> 6643  
<211> 380  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-H10

<400> 6643

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gcacgtttta aaaggtcaca tgatgctaca tagtcagcca agttagtata agaagcagcc 120  
agtgttggtta cgtgtcaagc acgtatcctc ccatcatggt tctactacag ggatgagaaa 180  
cactactagcc agtttaacac cttccttgac gatttaaccg taactacagt tattccacac 240  
actttgtaat cttgtcttgc acagtaccat accttcaata cttgtcatgt gatcactcat 300  
attcattttt catcaaatga tgttcaagtt ggatccacta gatgctgcac ctatcaatgc 360  
atgcactcat gtttttcagt 380

<210> 6644  
<211> 425



<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-005-Q1-E1-H11  
  
 <400> 6644  
  
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 tcccgaatgt cttccctata aaacaccata tgtatatggt aggtgaagtg tctaaagggg 180  
 gatacctagtt tttggagttg ggatttttgg ttttcttacg tgcgatgcag ggagcagtc 240  
 gggatagtcg cccgtaatgg ccaccatggc gtcacatag ctcaattgat agaactgtct 300  
 gtctatcagc tccacgaata tgtccggatc ttcttcgagt acggggaccaa cggccccggtc 360  
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 cataa 425

<210> 6645  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-005-Q1-E1-H12  
  
 <400> 6645  
  
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 atacctocca gtgcgctcaa atactgcaat tgcacgcag catggcaacc cataaacatt 180  
 ccactttcgg caagtgcagt catacgtctc aatgttgaca acattaactg agtcacgcga 240  
 taccttgaat aaattaccat ccccatcact ttctgtgggc ataacatcga gtgagtgagc 300  
 tttgctaact tcttctgca atttctggtt agctacaggc gttaatccgt caggccattc 360  
 attacaagac tctc 374

<210> 6646  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-005-Q1-E1-H2

<400> 6646

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gataaccttt tacaaagtaa agcaatggag aaaaatatga ttgccgtggc tagtgagatt 120

gagaggcttc ggggtgagct tgtaaagtct gaaaagcggg cactgctgt caccacggca 180

gcagctgtaa ctaaccctgg gtatgctcaa ccgtacagca gttctgaggc aacatatgcc 240

acaatgtatg gcaatcccgaggcagcatat gcagcatatg gcagtgtga ggcaacatat 300

gctggaacat atgccaatc tgatgcttat agcaccacta atcaggctca gactcgact 360

gatggtaatc cacattacat gaccagccg gctcactatg cgcagtacga aggccagcag 420

cagcagcagc agcagcagca c 441

<210> 6647

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-H3

<400> 6647

taccagaaat ggaggtggca gcctgatgcc tgcgacctcc caaggttcga tgctaagttg 60

cttcttgaga agctaaggaa caaaaggatg atgtttgtgg gggattcact gaacaggaac 120

cagtgggagt ccatggtgtg cctggtccag tctgtggctc catgggataa gaaaaagctt 180

gtcaagaatg gatctctaaa tgtgttccgc cttcatgagt acaatgcaac gattgagttc 240

tattgggctc ctttcctagt tgagtcgaac tcagatgatc cagacattcg tagcatcact 300

gaccgaatga tcacgccaac atcgatgcc aagcatgcag caaattggat aggggtggac 360

tatttgatct tcaacactta catttggtgg atgaacaccc cgaacatgaa aat 413

<210> 6648

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-005-Q1-E1-H4

<400> 6648

actcaaaaaa tcaacgtcta cgagcatagc atagcagtat aagcataacg tagaagtaac 60

tcccaaggtt tgaatgcagg acagtaggtt cctacctcat caactacttc ccaataccca 120  
catgttatca aatcctaacc atgcaatgtt tgaggggtgaa actaatgcat aaaaactggg 180  
tatgaaaggg atatgatcaa cgtgtgaact tgccttgtag tgttgatgaa gatgattcgc 240  
actcataact cttgatagtt ctactcgtca cactccgttc aatctagtaa gaaagcatta 300  
gtaaccacac ataagcaatc actcaaaaga ccgggaagaa tgaagaacac gattcgaaaa 360  
acatcaaaac caagcaaata actcttgc 388

<210> 6649  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-H6  
<400> 6649

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tgctagttga gtagttgtga atttgagaaa tacttggtgtt gaagtttgta agtcccgtag 120  
catgcatgta tggtaaactg tatgtaacaa atttgaaaca tgaggtgttc tttgattgtc 180  
ctccttatga gtggcgggtcg gggacgagca atgggtatatt cctaccaatc tatcccccta 240  
ggagcatgcg cgtagtgttt ggtttttgat gacttgtaga tttttgcaat aagtatgcga 300  
gttcttttatg actaatgttg agtccatgga ttatacgttc tctcaccttt ccatcattgc 360  
tagccctttc tcacattgag agttggtgca aacttcgccg gtgcatccaa accccgtgat 420  
atgatacgct ctttcacaca taa 443

<210> 6650  
<211> 335  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-005-Q1-E1-H8  
<400> 6650

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agtggactag ggggaacgga tgcgccccctc tttccttctc ttcacgtttc cctttccttc 120  
tcacgtactc ctacgaggtg gaacggctcc tagttctacg aggaaagggg gaatccgatt 180

cccggttgga cttgcactct cctgttgctc accatagatc gggcccagcc ctcttgacca 240  
ctacaccctt atatacctgg tcaatgggca tccatacac tcattaattg atctcctgat 300  
ctcttaacca tgtgcggtgc cccctccac catat 335

<210> 6651  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-A11  
<400> 6651

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ggacgaggaa gatcagatcc aggtcaatgg aaaagcacc tcaatcgggt caaggtgcag 120  
cgtgaagaag ttgcacgacc tgatttcctc atttgatgag gagaaacgac agtatgtagc 180  
cgagatggag tttggggggc tgctagagct accaaagata acaaggacgg ataggcattt 240  
cttgatgtct atcctaagcc acatcgatga ggaggcaagt tcaattacaa ttgatcacia 300  
acgcgacatg caatTTTTcg atgaagatgt caaactgggc atcggcatac catgtggaac 360  
tgctcctgtt cgccctccag accacgctgt tccggaggca gtggtgacac aga 413

<210> 6652  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-006-Q1-E1-A3  
<400> 6652

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gcagcaacaa caacttcagc ggctacggcg gcaagaaggg cgctgccgac ggcaagaaga 120  
agcacgcaa gaacgagcga tgggacaaca accatggcgc ggctcggag aagcggttca 180  
agacgtgcc ggcgtccgag gcgctgcccc ggaacgagcc catcggcggc tacatcttcg 240  
tctgcaacaa cgacaccatg gaggagaacc tcaagaggca gctcttcggg ttgccatcca 300  
gatacagaga ttcagtgagg gcgatcatgc cggggctgcc cctcttctc tacaactact 360

ccacccatca gctccacggc atcttcgagg ctgcgagctt tggcggagcg aacaatca 418

<210> 6653

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-A5

<400> 6653

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ggaatagttc tatgtcacia aaatcaagcc caatcaagcg tggcacaggt cctagatata 120  
cgggacacac gcacctagtg gagcggctct atatggcgcc ttaggcggca aatctcttcc 180  
ctggcgctct cgcaagctc gcctgagcct agcccaacaa aggctagtgc atcggggcgc 240  
agttctccta cgttcgctgg gacaatgggt gatcgggtcaa ccgttggcca tttggacttc 300  
tgtaaaaaat gaatctgaaa aattgtacaa aaacatgaaa tttgaaaaga acatggattt 360  
gaaaaaagta catatatttg caaaaaaaat gcaaatatga actaataaat tttgataaaa 420  
ttc 423

<210> 6654

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B1

<400> 6654

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ggttttgagg gatTTTTTgca gtgggggtttg taggggtgcta tgccgcgctg ggtttgggat 120  
ttgaaataaa acgaagggag atgtgccacg ctcttaaatag ccagtcttct gctctaattc 180  
tgctaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
aaaaaaaaaa aaaaaagaaa aaaaaaaaaa aaaaaaaaaa agaagaggaa aaaaattcaa 300  
agaataaatt aaaaaaaata aaaaaaaaaa aaagaaatag agataaaaaa aaaaaggggg 360  
gcccccaaaa ggttttacagc ctcttttttc 389

<210> 6655

<211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B2

<400> 6655

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gaaccttgcc tattgggtccg cctcggttga cgagcaggaa aatgggtctc ttcgtccctc 120
gcccttggtg ccgtcggtgt tgccgacata atcgacaggc tagcctctga cttgccttgc 180
ttgcatgata acgcaagacg tctccaccct tccaactttt aaccacatg gtgggccccat 240
aaccacagtg tccacaggat caaaacctga ctctcctgta ccccccggt ttccaaagtt 300
attccccacg cttgacttcg tatgtaattc acgggtcacc ttctaatagc tctattctgg 360
tatcagacgc tatacttact ctcggtgctc tgaaccctt tctcactctg gttcagactt 420
cgagcaacta tc 432

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<210> 6656  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B3

<400> 6656

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tagtaagatt gtcccttctc tcttttctc gcttttttgg gccttctcat tttatggcct 120
ttctctcttt gttttattcc tcaattggga caatgctcta gaaaatgatg atcatcacac 180
ttctatttat ttacaactca ttgattacaa ctcgacacta aaacatagta tgactctata 240
agaatgcctc cgggtggtgta ccgggatatg caatgagtca tcaatgatat gtatgaagct 300
ttggcatcgc caagcttagg ctcttgccaa tccttggtcc ataatccatc agatctatca 360
tgcaaaacgt gaaaacttca gaccagacca cttaacaaat catctcgtga tct 413

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<210> 6657  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B4

<400> 6657

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acgctctgga gaataataac tactgggtata tcattctata tcaaagccgg cttgtgaaat 180  
aaatgatccg ccgtcttgcc ttcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacggac 240  
gcacaaaagg attaaaacat aaagtagacg taaataaaaa atcataacat ctacaataaa 300  
gtcaacaaaa ttaaatataa atgaccgtcg ttttaaaaaa gtcattgactg ggaaaaaaaa 360  
aagagtggcc ccc 373

<210> 6658

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B5

<400> 6658

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ccccagatgt cttcatcggc gaccgtccg gctccggcgc caccgccgtc acggccgcca 180  
agggtgcccc cctcctctgc ttcgccacct gctggggcgc tgcgctctgg gctaccttca 240  
tcggtggaat catcatgttc aagaatctgc cgaggcacca gtccgggaac ctgcagggga 300  
agatgttccc ggccacttc acgctcatct ccgcctgcgc cgcgctctcc gtcgctgcct 360  
tcgcctacct ccaccgtgg aaggccgcct ccgcgctcga gcgctaccag cttggcttcc 420  
tcattctccg gct 433

<210> 6659

<211> 305

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-B8

<400> 6659

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 tgcccgttga gctgatgttt gtttcagcta gagaaatcgt tacgcccgt cataattcct 120  
 ttttcgacgc tctggagaat aataactact ggtatatcat tctatatcaa agccggcttg 180  
 tgaaataaat gatccgccgt cttgccttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaga 300  
 cagaa 305

<210> 6660  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-C1

<400> 6660

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 aatgacgacg acgacgacga tgagaggcgg tcgcggtaca agaagcgga cgacgacgac 180  
 gatgatgaga ggaagccacg gcacaagaag tgcgacgatg acgacgacga cgaccatgag 240  
 aggaggccgc gctacaagaa acgtgatgac gacgacgatg acgacgatga cagaaagccg 300  
 cgttacaaga agcgcgatga cgacgacgac gatgatgata ggaagccacg ttacaagcac 360  
 gatgatgatg aggacgacga 380

<210> 6661  
 <211> 352  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-C11

<400> 6661

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 cttctgaacc cgatgggcca cgagtcaca gagttagtga tctcctttga ctgatttcgc 180  
 taggatgata ctacatgagt tagaagtttg tcgtgccggg gacggaggcg agacggaggc 240



ttggcttgtg aagtgacgct tggatgcacg cgtaattttc tttacatttt ttgttctcgt 300  
 tttgactttg aggatcgcg c cataattcctt ttgaactgtc aactgcattc ag 352

<210> 6662  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-C2  
 <400> 6662

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 agcttttttg agaaatagag aaaccatgat atgagaggaa ttaaggagac acaaaagtgc 180  
 aagcttgttg atgccaagg caccccaaga taatatttca agaagtctca agaatctaag 240  
 cttggggatg cccagtagg catccacct ttcttcttca acaactatcg gttagtatct 300  
 gttgagccta atttttcctt attcacatga gttgtgctat ccttgcaatg tcattttatt 360  
 ttgttttgct tgatgtttga atacaatacc aagatctaaa attccttaaa gttagagagt 420  
 cttcacatag ttgcaca 437

<210> 6663  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-C4  
 <400> 6663

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 atatgaagat aaggaagaaa gagatgttta ttgtctgtcc aaaaagttct ctcacgtcac 120  
 ttttgccca agagaagata gagtccaagt ctctcacgtt ctggattcag attcggactg 180  
 cacagacata cctgactcaa aacgcacaca agtttttcat acggactccg aattgggtga 240  
 ttcttttttt gttggaaact agatttcgtg cactttccaa cccaattgga atcaccttca 300  
 aattcgtccg gagcgttgag ttgtggacga aacaatctga tgctgcagca gaatccgagt 360  
 caaactacaa gtccaaagggt gttacatcac ctccacttgg gccattggc cttgtacg 418

<210> 6664  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-C6

<400> 6664

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gctgggttcg ataccatggt ctgcaagttt tttaccaacg agggaaaaac aagtcccgag  180
cggaatcac  ggataagttg caaaaatcct gccggcagga tttgagcttt tccgattaaa  240
aaaatatgca tctagtgtaa aaaaaaacat tgtgctactt ttgaaaaatg tcaatagcat  300
ttggaaaata tttgtgaaat tcaagaaaaa tcacgtgttt cagaacaatg ttcatttcca  360
taaaatgttt atgcaatgaa aataaatgtt tgcataattt aaaaaaatcc atcgaataaa  420
aataaa                                           426
  
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<210> 6665  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-006-Q1-E1-D12

<400> 6665

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aggaaacggc ggctctgtcg tgggtgatttt cggcggggac ggttcggtca agcccggagc  180
aaccacccgt acgcgttctc ttctggaaaa aatcacacat tgcacatata tatggatgcc  240
tataatccca tcatggcatt gcgaagggat gccaaagtta tatacatata catagaatgg  300
aagtgtgtga aggtggaggg ggtcagaggg gtataggaga gcgatcagaa gccgagaagg  360
caaattggtg ttgtaattat ctgagtttgt agctactgcg gtg                                           403
  
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<210> 6666  
 <211> 370  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-D6

<400>       6666

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ttgacgggcc aaagaagatt gaggagggttc gaagggatgc tgtgaaacag aaaatgagcc   60
aatcaactag ggtaggttct tcccctaact ataactcatc tgctagctcc attagctcat  120
cagcaagacc agggcctcca ccagattatg gtgttcgagg atcttctgct tctcgtggat  180
cctctcaggt tcgtgtatat ggatcccaga atgttaatct ggatacaaga taccagactt  240
caaacagagc catgtcagtc ccacttcac c aaaggcgatc tgataaatcc attcgactta  300
gtcctcaagg tgacttggga agagaaatgt caatttgtgg gaagccacca gcttcaaatg  360
acattttgcc                                     370
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<210>       6667

<211>       266

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-E2

<400>       6667

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cgggtcgacg ggggtagtaa gaccaaagga cctaagcagc thtaggttga gaggagggttc   60
aacatggatt ggaagtgaag aagtggatcat tactaggtga tgacttctct ttggaagcct  120
tttcaaaatg aaattctaag gcagcagcgt cgtttaccta tctgacactt gctttttcta  180
tttatggact tctagctatt ggggatgatt cttatggatg cctgggttgg tttgatttat  240
atgcataaat gaaatgattc ttttgc                                     266
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<210>       6668

<211>       437

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-006-Q1-E1-E4

<400>       6668

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cgggtcgacc gggatgaagg aggagaaaag aaaatgaccc ttcggtccta tttatgaagc   60
aaaagacaag tgtcaggcgc gcgaatccag gagccacaaa tttcggaagc ggagttgtcg  120
```

cctcgattat tgcggatctg ttaaacaag aagggatcat aaatgttagc ttcattgatga 180  
 tgtcatgccg gtttacagta accaggaaag atgatgacac gacgggtcaa cgactacaag 240  
 aagattttga agacaaagat ttttgctaag gattgacatg aaccggttca aatcaatctg 300  
 gggcctaattg tcggggatat tactactggg cgtaaaccgg cctacctggg ccgggttaac 360  
 ttcattcagta gttcaatggt gttaaagccc aaagaggcag ataagggccc aaggcctaaa 420  
 atcggtttag aacctat 437

<210> 6669  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-E5

<400> 6669  
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 ccttagcttc ttatgctaatt ggtatctatg attactatga tgtggaacaa atagaaaaat 120  
 ttgttgcttt tatgtgtgct tatgagattg aatctatggt taaagcattt gacgattttg 180  
 attattcggg ttatagacca gaaaattttg ctatgcttag atattgctat gaaaattatg 240  
 aatacaatta caatattaat gcatttattg agaaagtctc ccctgtccaa gaagagacta 300  
 atattttgca ggaagctatg gaagaagaaa ttgatgaaac tgtgagctca ttggatgaaa 360  
 aagatgatga ggagagcgaa gaacaaaagg aggaagagcg gattagctac c 411

<210> 6670  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-E8

<400> 6670  
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 ttatgataat tattgtgatg atatgtatgc tatacaaagt agtgatgatt atattaaaac 120  
 ttgtcatgat tatgattacc ctttttctga atattactct tttaatgtgg aaacaattta 180  
 tagtattcga gtttcttatg atactccac tattccgaat gagaagaatt ttgcttatgt 240

ggagagtaat aaaatttcta tgctttaga tcatgaaaat aatgctttat gtaatggtca 300  
tattgttgaa ttcattcatg atgctactga aaattattat gagggagtaa tatatgcttg 360  
taggaattgc aataatatca agtttcctct ctgtgtgctt aaagttttaa agttatgttt 420  
gttttgc 427

<210> 6671  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-E9  
<400> 6671

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ttcatatagg gtgaatTTTT ttggtttcca ataagtttcc caacaagaat aagcaatgaa 120  
gtgtaagcca agtcctcaaa agattccaac ctgaagaagc caagaaccaa gtcctgtgtg 180  
ggccaatccc caattaatgg cgaatcctaa ggtcaaccca agaatggcgg gcgatgttgc 240  
gtgcaacccc taatccaaga caccaataat aacccttaaa ctaatcctca agtccaagac 300  
attgataact tccttaaggt tgcctcaact cctgtggaca tttttgcccc taattgcaca 360  
tgccacttac acgtgggacc gaccagtat aaagaaaaag aactctctgt cacacctcac 420  
tctcac 426

<210> 6672  
<211> 392  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-F1  
<400> 6672

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ccaccatgcc cgttgagctg atgtttgttt cagctagaga aatcgttacg cccgctcata 120  
attccttttt cgacgctctg gagaataata actactggtg tatcattcta tatcaaagcc 180  
ggcttgtgaa ataaatgatc cgccgtcttg cttcaaaaa aaaaaaaaaa aaaaaaaaaac 240  
aaaaaaaaaa acaaaaaaaaa aaaaaaaca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaat aaaaaaaaaac aaaaaaaaaa aaaaaaaaaa ataaaaaaaa attttaaaca 360  
aaataacaaa acaaaaaaaaa aaagggggcc cc 392

<210> 6673  
<211> 446  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-F2  
<400> 6673

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aaaaaaaaa aaaataaata ctaacaaaag aatcaacaca ataaaaaca aaaacaaaca 120  
aaacaaatcc tttttcgaag acttaaaaaa aaaaaaatta aataagaaac caatccataa 180  
catcaaaatc gtaaaaaaaaa aacaaaatca aaaaacataa ccgccccccc caaaatttcc 240  
acctttactt tcccgtagaa cccaattaaa accccccac aagtggcccc ccaattttat 300  
ttcagggcct cttttttaaa aaattcgacc cgtgaaaaac ccctgttttt cccaatttta 360  
ccccttttaa aaaaaacccc tttttccaaa tttggataaa cctaaaaggc cccccctttt 420  
ttccccttcc ccaaattttt ccccc 446

<210> 6674  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-006-Q1-E1-F3  
<400> 6674

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caaaaatcag gtcgccgcga gcttcgccgc ggagggcgct gtcatgaacg agctgaagca 120  
gtggaacgac ctctacggcg aaggagggc gaggaagaag gaggagctga cctacttttt 180  
gtagaaccgg aaggatgggtg gatgtgtcgt gttgggcaaa tcgctgaagc cttggcagag 240  
catgagcata catatgttgg tgggaaaagg agagaggatt tcctgtgagc aaccgtgagt 300  
taggatcttg gagtgaatgg actccttgag atgtgtggca gggggcattg gatcatgtac 360  
gattctttta tacgaacaag tattgtagtt attcattatt atatatgttg tacctggttt 420

gttaacctgt gtgt

434

<210> 6675  
<211> 453  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-006-Q1-E1-G1  
  
<400> 6675

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ttgctgaatt aatgttgcca tgcacgcaca ggagttcgcc tgaatttcgc agtatatttg 120  
ctggtgaatt aatcaaacag atgggaactg tcagtgaaca catcaaagca atatcacgaa 180  
atggtgccaa acatgttggt ttagttcctt caggaaatga tgtttcatcg aacaaatcca 240  
gtggtcgtaa aggaattcga ggtggaagtc caaatattgg caggcgagtc acggttggtg 300  
atgatccaac tcctccttca gcatctgctc tgcaggcaat agtgtggctg cgctccaat 360  
ttatcatcag gctgcttcaa gtaatcctgg cagatanggg catgaggcat acatttgctc 420  
ctgcgatact aagcctgctt gcggcacgca taa 453

<210> 6676  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-006-Q1-E1-G10  
  
<400> 6676

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tcggtcactg ggaggatccg gtgctcgaag tctgacatct aagtgtatgg ttgtgtcttc 120  
tcgcattcgc gttgatagtg tagttgtgat gttgcccaga agaaaatatg agacacagga 180  
agagccgatg agatgagata gtgatcgctc ctgttaatat cgtggacgtt cggaagaag 240  
ttgtagattc tagtaaccga tctggcctag ttttggtcat cctagtgttg gccttgggat 300  
ttttgcagtg ggaggatccg actcactgtt tcgccttga ccttcatttc ttcactttta 360  
gttacattct ttttagcttt tacttggtt tttcgatgt acctttttat tcaacacatg 420  
tccaagtttt t 431

<210> 6677  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-G12  
  
 <400> 6677

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ctttgatcac cagatatcgc ctactcttct ctatactgct tgcattagag tagtgtagca 120
tgttactgct ttccgtcaat cctattctga tgcatagcct gacattgttg ctacacctgt 180
tgatacctta cctgcaatcc taaatgctta gtataggatg ctagtttata atcattggcc 240
ctacattctt gtcagtctgc cttgctatac tatcgggccg tgatcacttg ggagggtgatc 300
acgggtatat actatacata catacatact atacagatgg tgactaaagt cgggtcagct 360
cattgagtac ccgcaagtga ttctgacgat ggggctgaaa g 401
  
```

<210> 6678  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-G2  
  
 <400> 6678

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tgcgcggtct aagtctaagg aaataaaaaa aattcgctta tacaatttca tctacatcga 120
atztatatat cagaatagcg gatagaggca tcattaaagg agtcaggctct acttacttta 180
tgcttcttcc caattttatg gtggatttga taagaaccct ttttgctttc ttgataaata 240
atcgacaaaa aaagcgtttt ttttatataa cctgcttggt ttattataat tataacaagt 300
cctatatgga aatgcccgtt aaagagaaaa tctgtttgat tgtctctcgg ccaatatcga 360
tttttagaaa gaaaaaacia gaattttctt ctttttttat taacattaag aaaaaaagaa 420
tataac 426
  
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<210> 6679  
 <211> 374



<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-H10  
  
 <400> 6679  
  
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 ttctgactgc gaagtttttg gcctcttcgg gtcttggttt ggaggagggc tgattggggt 180  
 agcagatccg ttcttgccgg agagcaccac ttccagcccc gtatttcctt tgtgggtttg 240  
 caaacctgc acctcatcag aaggacgttt gcgattggca tcagaatcct ccgtctccat 300  
 cttctcttgc ttaggatcat catctcctt cgtagcttgc tggcccgacc cttgttggtt 360  
 tgaagtcctg ttcc 374

<210> 6680  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-H12  
  
 <400> 6680  
  
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 acttgtcaat tcgtgcagtt gccgaggcat cgtggggagc caggatgccc acgtccaatc 180  
 aaccgccacg cgtctcccaa ggccgcaggc tattggggccc gtggcgcttc gtacttgccc 240  
 cttcgcttcc ctgctaagcc aagtctgggc gcgccttggg cccgggggct actgtcagca 300  
 ttctgggaac ggggttacct agacttgccct gcctgcggcc tgcagcgtgg ctcaggagc 360  
 ggcccagtac ggcccatctt catcagcgca tgccca 396

<210> 6681  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-006-Q1-E1-H2  
  
 <400> 6681

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 aactcccagc tgagttaagc ggttatgtaa tccagacata gtgagtatgt gctcactgac 180  
 agaactatct tctccatct tacagctgaa gaacttgtcg gaggcctcat atctctcgac 240  
 ccgggcata gcttgaaaaa ccattttcag ctcttcgaac atctcatatg ctccgtgtct 300  
 ctcaaaacgc ttttggagcc ccggttctaa gctgtaaagc atgccgcact gaacgaagga 360  
 gtagtcatca gcatgtgtct gccaaagcgtt caaaacatcc tgttctgcaa gggaaac 417

<210> 6682  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-H3  
 <400> 6682

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 taactcgatg gatccgagtg aacgattctg tcaatgatcg cctcatcctc ggagattaac 120  
 tcccatctga gttaagcggg tatgtccacc agacatagtg agtatgtgct cactgacaga 180  
 actatcttct tccatcttac atctgaagaa cttgtcagac gcatcatatc tctcgacca 240  
 ggcgatgatc tgatatacca ttttcagctc atcgaacatc tcatatgctc cgtgtctctc 300  
 aatacgcttt tgggtccgcg gatctaagct gtaaagcatg ccgcactaaa ctaaggatta 360  
 ctcatcagca atatgtctca caagcgttca taacatcatg ttc 403

<210> 6683  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-H4  
 <400> 6683

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 tgggtccggc gccgtcgtg gaaaataata ggaggtgtgg gtgagtagag gaatggcctg 120  
 gccagcaatg aagtagggta gggcgggtgc gcccggtgcg cagcacagcc ggccacggga 180

ggcgggagca ggcagtccca ccagagctgg tttgggcggc tggagcaaga agatcagata 240  
 ttgaagaagc agcacggctg ttagattaac atccaacgat cactgctgct acaatcgttt 300  
 gtggactaac ttgataagac caaagtacac gtcaacctag tatacccaca aatcagcctc 360  
 caaatctgtc ccaaacaaca taca 384

<210> 6684  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-006-Q1-E1-H6  
 <400> 6684

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 gacctcgacg ccggtgcgcca gatcatcgct gaaatcgacg cgcagatgac cgggactggc 120  
 gaggagtctg acagcgaggt ggcggagatc cgcgcccggc tgctcaacga gcccacgag 180  
 gtcggggaga cgcgctgct catcgagct gagaaaggt tcatcgacgt cgtcctcgag 240  
 ctgctcaatc actctgacaa ggagagcctt gcgaggaaga acaaatcagg attcgatgct 300  
 ctgcatgtcg ctgcaaagga aggccaccga gatattgtga aggtactcct ggaccatgat 360  
 ccatcccttg ggaagacgtt tggccaatca aatgtgactc ctctgataac 410

<210> 6685  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-A10  
 <400> 6685

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 gcttgattgc cgagccttgc cggacagcgc atctgcacgc catgaacgtt gccaaagacg 120  
 ccggcgcgct tctctcgtat gaccgaacc tgaggaggc gttgtggcca tcccttgacg 180  
 aggctcgac caagatcttg agcatctggg accatgcaga cattgtcaag gtcagcgatg 240  
 tcgagcttga gtttttgact ggcataact cgggtggagga cgatgttgcc atgaagctgt 300  
 ggcgcctac cttcaagctc atgcttgta ctcttgaga tcaaggatgc aagtactata 360

ccaaggattt ccgtggaact gtcccatcct

390

<210> 6686

<211> 320

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-A11

<400> 6686

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gatcacgtat atgtgcctaa tgaacccgag agcaggaagt tgattctgca agatgcccatt 120

gattcgccgc attcaattca tccaggaaac accaagatgt atctggatct gaaggaaaga 180

ttttggtgga caggaatgaa gaaggatatt gccgagtatg tagcagtttg tgatgtatgt 240

cggagagtta aggcagagca tcagaagcca aatggattgc tacagccatt gccaatatccc 300

gaatggaagt gggataagct 320

<210> 6687

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-A12

<400> 6687

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aagttgattc tgcaggaggc ccatgattcg ccgcattcaa ttcattccagg aaataccaag 180

atgtatctgg atctgaagga aagatcttgg tggacaggaa tgaataagga tattgccgag 240

tatgtagcag tttgtgatgt atgtcggaga gttaaggcag agcatcagaa gccatatgga 300

ttgctacagc cattgccaat acccgaatgg aagtgggata agccaggcat ggactttaac 360

actggattgc ccaggaccca a 381

<210> 6688

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-A2

<400> 6688

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aaaattgctt aagattgatg atttggctag gaatgttgat agaattgctc ttgatgttga 180  
tgctttgaaa cttagatcta ttccacctaa gcatgatatt aatgagtctc taaaagccat 240  
gagaatttca attgatgagt gtaaagaaag aactgctagg atgcgtgctt ccaaagatgc 300  
ctttattaaa tcttgttctt ctaattctta tgaaaatcaa gatgaagatc taagaattat 360  
tgatgtgtct cccattaaat ctttgttttg caatatgaat gtagatgaaa ctgaata 417

<210> 6689

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-A4

<400> 6689

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cgtactagag gttcaaacaa gtgtgagata tgccagcaag ttgctgtcaa catacctcct 180  
ccagagacac aagcaagtgg atggtttagc ccactctggg ttgcatttgc aattctgatt 240  
ggtggtctat tattggatgt gctgatatct gtttctcttg gtgtttccgc acttcctgtg 300  
aacataataa ttggtgttct gattgttctc ggcttgggca ctgcccttcg actagctctc 360  
gagtgtgcc aggagtttgg ctgaggaga agcatgccaa ggatggaaaa catggcaccc 420  
agtgggtac 430

<210> 6690

<211> 275

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-A6

<400> 6690

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attgatgtct ggttccgtac taaaggttca agcaagtgtg agatatgcca gcacgttgct 120  
gtcaacatac ctctccaga gacacaggca agtggatggc ttatcccact cggggttgca 180  
attgcagttc tgattgggtg tctagcattg gctgtgctga gaactgtttc acttggagtt 240  
tccgcacctc acgtggacat cataattggt gttct 275

<210> 6691  
<211> 315  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-A9  
<400> 6691

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ggctccatac caagatgatg aaggacgttg acgacatgct cgcctatgac attcccgacc 120  
tgctcaagca gttcaggaac ccctacgagt gagtcaactc aatgaccatg gatggaaatt 180  
ccagacccca attttatttc tcgtgggggt cagcggaaac ttgaacttga ggtgtatgta 240  
tgttaacttt gatcataacg ctttgatgta ctatataagt atcagtcaat caatatttac 300  
atgacctcgt tgatc 315

<210> 6692  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-B10  
<400> 6692

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agcgtggaaa agggatagta acattgtccc ttctctcttt ttctccatt tttttcattt 120  
tttcaatttt tcattttttt tgtttgggat tctttggcct ctttttttat ttgggcttct 180  
ttggcatctt ttgtcacat gggacaattc tccaataatg atgatcatca cacttttatt 240  
tacttacaac tcaagaatta caactcgata ctagaacaaa atatgactcc atatgaatgc 300  
ctcaagaagt gtacctggat gtgcaatgat ctagcgtagc catgacataa aaaactggac 360

aagccatgaa aacatcatgc tagctatctt atgatcatgc aaag 404

<210> 6693  
<211> 176  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-007-Q1-E1-B11

<400> 6693

ggcgggtgacc gagaccctga actacaacaa gcaacatanc gtggacatgc accggctgcc 60

ccctcaggtg cagaacctgg taaatggctg gtaagacaga accactgctg ttagtagtac 120

atagataggc ctgtaatttg tgacactaat cctttttcct cctctccctg atgcaa 176

<210> 6694  
<211> 171  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-B12

<400> 6694

gaggtgttcc cttgggggtat gttcgccgc attcatggcc tgcccaaagc cattacctct 60

gcaatttgta ggtcaaccac tacgcttggt atctgtatgt gtaatgtgat cttggtacta 120

tacaacttgc cacttcccgc agtataagta atattgagct tctgaatgtt t 171

<210> 6695  
<211> 411  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-B2

<400> 6695

cgggtcgaca cggcgtcgca actgggtata tgtcacgtca gtacccccat tcctatccag 60

gagtgggaat aggcctcag cgccttaatt gcaccagatg cctgccgcgt cgtacttgca 120

tcagacgcc gccacgcat tcgccttgct cgcggaccga taggctcaac cgctccttg 180

gccaagtgt ccaccgggcc cagtggagga acatgcccggt cgcattctcg agctgggtgat 240

ctccgatgaa atagccaact tggatgaacg cctgcaaaca cgagttcagg cagagccaag 300  
agctactgta cgcaacggct gctgggtcatg gtctcatgga cgcgtttcat tttgttgagt 360  
cgtttcgcacg tggatagcaa tgtatttaca gcaattatag tattgctctg t 411

<210> 6696  
<211> 415  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-C1  
<400> 6696

gggtcgaggg gctcgaagcg aactgctgcg gcacattctt ggcatgatct ggagatagga 60  
cctgaagccc ctctaattctt caatgccgtt gttgagatca caaaggggag caaagtcaag 120  
tatgaacttg acaagaagac tgggatgata aagggtgaca ggattctgta ctctccgta 180  
gtctaccac ataactacgg tttcgtacca cggacgctgt gtgaagatgg agatccaatt 240  
gacgtcttgg tctctgatgca ggaaccagtc atacctgggt gctttcttcg agctaaggct 300  
attgggctta tgcccatgat tgatcagggt gagaaagatg ataagctcat tgctgtttgc 360  
gttgatgatc cagagtaccg tcatctcaac gaccttaagg agctctctcc ccaac 415

<210> 6697  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-C10  
<400> 6697

gggtcgacgg ggtcggttac atgagcggcg gctgcaagag tgatgatgga agtttgagtt 60  
gtggatattc aagttttaga ggaaaaagg caaccatgga agacttcttt gacataaaat 120  
catctaaaat tgatgataaa caaataaatc tctttggaat atttgatggg catggggggt 180  
cacgtgctgc tgagtatttg aaggagcact tgtttgagaa cctcatgaaa caccacaat 240  
tcatgtcaga taaaaatta gcaataagtg aaacatataa aaaaactgat tcagatttct 300  
tggattctga aatcaacact cacagagatg atgggtcaac tgcacgcaca gcagttctgc 360  
ttggaaatca tcttt 375



<210> 6698  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-007-Q1-E1-C11  
  
 <400> 6698  
  
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 aaagcccgca ctgtcagatg ggaaaacccc aaacgtcttt ggacgatgtc cagaaacggg 120  
 gaacttgaaa gaataagaac acaaacatct gagccaccgt cagactcatc aacgtcggag 180  
 ccagcgttgt caggcgctg aatagcatgg gatcagtcca tcatcgaccg cagcttcact 240  
 tcacttcagt tcagctcagc atactatgga gaccacgggg aatgtgagag tactgacata 300  
 tgaccaatc gcgacaaagc cttgtgctgc aac 333

<210> 6699  
 <211> 395  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-007-Q1-E1-C12  
  
 <400> 6699  
  
 gggtcggccg ggcacactat tcacaggcat catacaccca ccacatacct tcctcaaaac 60  
 agcaaccata gctacctatc atggcatttc catagccatt ccgagatata gtgccatgca 120  
 actttccacc attcctttca gtatgagacg ctccatgatt gtcattattgc tatgcatgat 180  
 catgtagttg acattgtatt tatggcaaag ccaccattca tatttctttc atacaagtca 240  
 ctcatgagtc attgcacatc ctggtacaca gccagaggca ttcatataga gtcattttt 300  
 gttccaagaa tcgagttgta attcatgagt tgtaagtaca taaaagtgcg atgatcatca 360  
 ttattagagc attgtcccag tgaggaaagg atgat 395

<210> 6700  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-007-Q1-E1-C4

<400> 6700

gggtcgacgg gccacggcga tgtcgtccta ggaggaagca agggatgcgc ggcgcgggcg 60  
gggcggcggtt gatgcgcgcc gcccggtctc tctgcagatc tgactgangg tcagcaagtt 120  
ttggaagata atgcgcaaac ttttaaatta gtttcttcgt ttattctctt agattgattc 180  
tcttggggta gcaactggtag ctactccctc cgttcggaat tacttgtcgc agaaatagat 240  
gtatctagac atattttaat tctagatata tccatttccg agacaagtaa ttccgaacga 300  
acagagtaag ttctaagtgt agacatcttc aatagatgat ttagatgtaa aaataaggaa 360  
aacgattgcg cgctcagtcg gctgatgacc 390

<210> 6701

<211> 197

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-C8

<400> 6701

ggtcgacggg atcaacgaag ggatacggga agaccataac atgtatgtac ggtcgatcta 60  
tttcagaacg catactatcg gtctcgtaca ctactacag ttgtcttcga cttatgacgt 120  
catcagtggg agcaagggtga ccttgcttaa catccgtgca ctcaacatta tgcacgtttc 180  
actcgcatgc ttgttac 197

<210> 6702

<211> 342

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-C9

<400> 6702

gaagaagatc taaaacgtct cctgtgaacg gtacttcggt ttcgggtgtg agatcgacga 60  
ggagacatcc aacaaactgg aaggcattcc tgggtgtttg tttgtgcttc ctgattcgta 120  
tgttgatcct gagcacaagg actatggagc tgagcttttt gtgaatgggg agattgttca 180  
gaggtctcca gagatgcaga gaagggtgga gcctgtgccg cagagagcat cagataggcc 240  
tcggtacaac gacagaaccc gctaccaacg gatgacggag aaccaatagc ggtgatgagc 300

cgagggtgctc gattgaagat caaataacaa gccctggtgg tt

342

<210> 6703

<211> 327

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-D10

<400> 6703

gtatgacaga gaatatcgat atacgttatt ctacagtatt actctacaga tccatcagct 60  
ctaagtaaac tgcgtataaa tcatgtatgt ataacgtatg tggtactgat gttacaagtt 120  
gagtccatgt gtgacggtgc ggctgtaaca caacatgtga ttcataatat ccacatgcct 180  
caccatgtaa gaaatatgcc ctaaaaaaca aataataaag ttgttaatta aaattccata 240  
ataacatgat aaatgtttta taaatcaatg ctaaaattgt aaataaccga aaacttaata 300  
aaatgtgtga atacggcccc ccaaaag 327

<210> 6704

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-D12

<400> 6704

gggtcgaccg gaggaagaga agaaaaagca gctatttcac ctggtgtcgt aataaccact 60  
gttttcgggt ttgaaggcat aagcgcagca gagatcttct ttcatttaag aagaagccac 120  
cgtaaagaag aggaaacaag gcgtttaagg gacaccgact cccattatct tctccaggcc 180  
tgctttggct aaatcgacgg aggcttagct tattatgttt cgggcgttta gctagcttag 240  
agaataaaga aatctatctc taaaggggga gcggtacgac tatttttaggt tagaggaagg 300  
ttgaagagag aatagctaaa atagccagtc gggtaggcaa gtgcgggtgg ctgtggtcaa 360  
agtgaatatg tcctgtttcg gtt 383

<210> 6705

<211> 422

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-007-Q1-E1-D4

<400> 6705

cggttcgacc ggatactaaa aaaagattga aaaggatcaa attttgtcat atcacgaaga 60  
aatctatccc ttccatagca ataacaagaa ttaaaaaaaaaa gggaatgaca aagcatctgg 120  
gaataaacga ttaattttcta tcaataaacc tgctaaagca ccaaaccata gagtacttag 180  
cacgggtgct acagagagat atgtttttat atcccgcatt gaaaatcctc cttccttggt 240  
ggaatacata tatgatcata aactcttgcc caagattggt atgctatata taaaatgaac 300  
catatcgacg aaattttcct atccctaaaa aagaaaaaga tgaccccttc ttcctatata 360  
ttaccaagga aaagtaatcc ttcttttata ngcgaaatta tattggattt tatatgtata 420  
ta 422

<210> 6706  
<211> 335  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-D9

<400> 6706

agctagataa aaaatcgctt ccatttttga agacgatggc tgaggtttca ggggtggcctt 60  
tgaatagata tgaaacactt gctttgctaa tcttttcttc gggttcttgca gtggatctat 120  
ggttttggga gtttctcggt gaaagcagtc tgaattgggc atctttggct gggtcctgga 180  
tcgatcaatt tagtgctcca ttttgacaaa gagtttacia aaccatttac tgttgcagtt 240  
agtttcagat attagttgga gtgctgtcta tgcaaacttg tagataacaa tttattgaat 300  
caacttgga tgagattagt gagaaagttg aagcc 335

<210> 6707  
<211> 416  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-E1

<400> 6707

gggtcgacgg gtctgccaag gtgacatcac caaggtactc accaagatgg tgcactggaa 60  
 ccccgacctt gacttcgacg cctcgctgga cagcttgccg gaggggtgtgg acctcgcggc 120  
 gctcagggag cgtatcaagc ccgatcatcag ccatatcggc ggaatccagt ggatagaggg 180  
 ccagcaccga gattaggcac cctgtctcgc actgccgctg caggttcctg accaagacat 240  
 ttttatcttt agttagaacc gcagcaacaa atgatgtaat ataactctgc agtacttttg 300  
 agacaatgca tgttaatttc ctgtccgac ttcgctttgt acgttcaccc tacgctaata 360  
 gggtaggctt gccggcgcggt aaaccacagg cggcaccttg aggatggatc cccaat 416

<210> 6708

<211> 337

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-E10

<400> 6708

gtcgtagaac gtcacagtca tctacgcccg cgccaagcag tacgccgacg agtagtaggc 60  
 ccacgacaat gagttgggtc agcttaagcg tgaagcccgg atgaaggggtg ggttctatgt 120  
 cagtcctgaa gcgaacctgc tgtttgttgt cagattcaca cgtatcagtg ccatgcaccc 180  
 aaatagcaaa aagatctttc agctgttgcg tttgtgacac atattcagtg gtgtgttcct 240  
 gaacgttaac aagggcatca tcaacattca ccgcatggtc tatccatatg ttgcatatgg 300  
 gtacccgaac ctgaatagtg tgaggggagtt tatctac 337

<210> 6709

<211> 275

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-E11

<400> 6709

aacaaaaaaaa atagaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa aaattaaaaa 60  
 aaaaaagaaa aaaataaaaa aaaaacgggc ggcccaaaag attcaaactt aacttacctt 120  
 taaagtcaag ttaaaacccc tcaaaaattt tcaccaaatt taaattaatg ggctttcttt 180  
 taaaaagttc ttaacgggaa aaaccttggg ttaaccaaatt ttaacccctt tgaagaaaat 240

cccccttttcg caatttggcg taatacctaaa aaggc

275

<210> 6710

<211> 421

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-007-Q1-E1-E2

<400> 6710

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gcccgtcca ggcgaggact tggaagccgc tctgccaggc ccgccgccag gaactccacc 120

tccgtctcgc atcaccagc aggagactcc agcttctccg gctgcggctc cagaagatga 180

tctgcctctg cctcctcccc ctccactgac ccagcatgag gaggatggaa cgccagaaga 240

tgatctgcct ctgcctcctc ctctccact gcccagcag gaggctggag cgccangttc 300

agcgcagag gcaggagccg tcgatgacaa gtgggcagga ggtggcgatg acaagtgggc 360

gggaggcccg gatgacaagt gggcttagtg gttgcttaag gcgtggaact gaactgaact 420

g 421

<210> 6711

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-E9

<400> 6711

gtcaagaata tcggggccgac gcggagaaga agaagtccag cgagaacgtc aaggatcatc 60

acgcccgcgc caagcagtag gccgaggagt acgatgccca ggacaaggag ttgggttcagc 120

ttaagcgtga ggcccggatg aagggtgggt tctatgtcag tcctgaggct aagctgctgt 180

ttgttgtcag aatcagaggt atcaatgcc tgcacccaaa gaccaagaag atcttgcagc 240

tgttgcggtt gagacagata ttcaatggag tgttctgaa ggtaacaag gccaccatca 300

acatgctccg cagggtcgag ccatatgttg catatgggta ccgaacctg aagagtgtga 360

gggagttgat ctacaaaag 379

<210> 6712  
 <211> 376  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-F10

<400> 6712

aagctaaaga acaccctgcg caagcataac tccaacaccg tgaacacttc cggactccg 60  
 ccgagaaggg gccatcacgg taacacacac ggttgattca ttttaattaa gtttagttca 120  
 agtcatctac aaccggggcat taacaaattc ccatccgccc ataaccgcgg gcacggcttt 180  
 cgaaagatcg atccctgcag gggggtccca acttagccca taacaagctc tcacgatcaa 240  
 cgaaggaata gacctccacc caagacacac cgatcagact cggtagcttg gtacaacaag 300  
 atgattcggc aggttaaaac aagtccagca acaccgccc aatgtgccga caaatcccga 360  
 taggagctgc acatat 376

<210> 6713  
 <211> 338  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-F11

<400> 6713

gggtcgaccg gtacggccac tacggtcgct cgacgacgaa gtcggcgaag aggagcggcg 60  
 gcaagaagca gacgagcagg atcgtcggct tcgtgaatat gcacttcgtc ggcacctcct 120  
 tcccgcagc tcgagcgacg gatcgggttg acgccagccg cgcgccctgc tattcgtcat 180  
 acaacgacta cgaagtacgc gcggagtggg acgctgtggt tccggcgacg gcggcgggcg 240  
 tggatgagga ggtgggtggg gtgtgcgacg acacggcgga gtgcgggtac ctgtgttggc 300  
 tggaggagga gaggtcgtcg ggtggcgtgc cggcgggc 338

<210> 6714  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-F2

<400> 6714

cgggtcgacc ggcaactgaa gctctcaagt agtctaagtg aagtgaaaga acttactgca 60  
 taatagatac aaacttcaca gcaagatcag cacccaaagc caacaatctg aaacatattt 120  
 tgtcacagat aagatatgtt gctgattgtc ttaatgatat aagtttacia tcagaagccg 180  
 ttatacagaa aacaaacaag tattattgga gcctggatga tgacatcgaa ggaatttctg 240  
 ctttgagcaa tgcaggccat gaagaacaac aactataaag acttgccaca aagaaattgt 300  
 tctaaacatc caacgataca tgtgtctaac atagctcttt ctatctacat gccttgctca 360  
 taatattgta aatgatcggt cgtaagctta ttagaaaaca tgtatcatca gcaaccatcc 420  
 atccatcatc aattcaatac tt 442

<210> 6715  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-F3  
 <400> 6715

cgggtcgacc ggtcctatgg agccatagca cgacgacttc ccgactatct tccaacttag 60  
 tatgatagaa gactttaaaa ttctcttttg ggaaacaaag tgcaagtaag tgaataaaat 120  
 ttcctttgtc ccaactgttt aagacaaaca aatgaaagct aaactcctct gagacctctt 180  
 ttagacactt cctatggata cgtagtagaa acaatcataa ctttctacia caatatgtag 240  
 aaagtgttac tttctctatt ctcatthaaga aacattagta acaccaattt tatttacact 300  
 ttttttgaa atgtcattta cactttaatt agatgtatat gttccttttt tattgctaac 360  
 cgggccgacc gatgggtgat gactagtaaa attcatthaag taaaattcgt tttgtcaaat 420  
 caagaa 426

<210> 6716  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-007-Q1-E1-F9  
 <400> 6716

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cataggctcg ttgtgcacgt ccctgctctt cctgagggca ccgctcgggc ctcaacatag 120  
caggaacagc ggtactgctg gataggcgaa agagatggca ttttcgatct gaccagactc 180  
atccttgaca ttctcatata taaagatctg cgggttgactc cagctccggc accattgatg 240  
gtgtgagcta attttcgttg gtcaacgctg taggttctac agtgctaattg cgaaaatctg 300  
agatctgaaa atgtcactgc ttcccgctg ataccctaata catccatgca gttggtgact 360  
taatcaatcc gatggaattt gctgct 386

<210> 6717  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-G1  
<400> 6717

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cggcgactac cggccggtga ccagcaccaa ggaggtggat ccggctgacc tgcgtgcaga 120  
gatgctcaag cggaggttgc tgcagcagca atgatgcgcg tgctgcaaac acgctaccgg 180  
cccataggtt cataccgtca tgtacaacaa aacgttaacg ggcgtgctaa actatattta 240  
ctaggtgcc a tgcgggacaa cgacttgctg ggaattgct tcctgtaagt atgtaagtct 300  
tcaacagaca cttacatatt tacttgttct acgcaaactg tccaaaattt ccagtggtt 360  
tcgcacacca cgacaatatt tcagcacaaa aaaaaatgaa aa 402

<210> 6718  
<211> 366  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-G10  
<400> 6718

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ggagcaatat ttttgctcgc cacatgatat gtgttttgct tggagcgtat tgtatgatct 120  
tagtgcttgc tttttatatt accacaatca tccttgctgt acacaccttt tgggagaaac 180  
ccacttgatt ggaatttatt agaatactct atgtgcttca gttatatctt tggagctaga 240

tagttttgct ctagtgttc acttatatct tttagagcac agaggtggct taattttgta 300  
gaaattgttg atctctcatg cttcacttat attattttga gagtctctta gaacagcatg 360  
gtgttt 366

<210> 6719  
<211> 378  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-007-Q1-E1-G11  
<400> 6719

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ggaacaaaat taccaaagga acggccaaaa aaaaaaaagg caattgccga aaaaattacc 120  
aatttcaaaa ggctggttca aggtggcaac ccggtggcaa tgccaaattg gaataagtct 180  
gagcaagaga tggaggatgc aggggtcact ccggttacta agagctggcc cccaggtgc 240  
agaacttggg tctatgcgca tggggggacg ttggaccga agacaagcct agtttcgaag 300  
aangcaagtc taaaangagc agaacaaaag ttacttgacg caatagaaga tgctcgaaag 360  
ggggtgttca cgccaac 378

<210> 6720  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-007-Q1-E1-G12  
<400> 6720

gggccgaccg ggggtccaac tgtatgagtt catccctgga agacgtgatt cgtcagtttg 60  
tcccgtgaa gggcgcttc ctgatgctaa gaaaggcgca ccacatctga gggacatctt 120  
ttatcgaatg ggcttaacag acaaagatat tgtagcacta tctgggggcc atagtctggg 180  
aaaggcgcat cctgaaaggc ctgggtttga cgggtgcatg actcgtgatc ctctgaagtt 240  
tgacaactca tactttcttg agctactgaa aggggaatca gaggtcttc tgaagctccc 300  
tactgataac gcattgttgg atgatgctga atttagacgc tatgtggagc tttatgcaaa 360

ggacgaggat gcttt

375

<210> 6721

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-G2

<400> 6721

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taaataaaac ggtgaaaatt tgcattggcaa tatatctcaa aatggctatg gaaatgccat 120  
aataggtagc tatgggtggct gttttgaaga acgtaaataa tgggtgcatg ataccggcga 180  
aagttgcgcg gtataataga ggctagcaaa gtggaaggat gagtgtgcgt atatccatgg 240  
actcacatta gtcataaaga actcatatac ttattgcaaa agtctacttg cctcgaagc 300  
aaagtactac tacgcatgct cctaagggaa gggttggtac gagttaacta tcgcgcgatc 360  
ccgacctcca ctcataagga agacaatcaa aagagcaact catgcaacaa atttgtcaca 420  
caact 425

<210> 6722

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-G3

<400> 6722

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ctgttttggg aacttgtgtt ggggtgttaa gccgtcgggtg ctttctttgt cgctgttgaa 120  
ctgcatcatt agtacttcgt ggaacaagta tctcgcttaa tttgttctgt cctgcccggc 180  
cctgtctttg ctcttgggtga tcggatcata aaaaaacaaa aaacatttct gaaaagacac 240  
aattaaaaga tatatgccaa atgatactaa caactatcat ggtactatga actaaaaatt 300  
aggaagagaa cggatcaaat gtcaattaat acatgatcaa agggggcccc cttaaaggttc 360  
aaaccttatt ta 372

<210> 6723

<211> . 426  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-007-Q1-E1-G4  
  
 <400> 6723

cgggtcgacc ggatatccaa tgtataatTT cccttcgtgc ttaccgaagg atgattgcta 60  
 tgatgattgt tatgatcccg ttgattcttt tgaaatatcc ctttttgatg atgcttgcta 120  
 tgcttgTggc caagatgtca atatgaatta tgcttatgga gatgaacttg ctatagtTcc 180  
 ttatgttaaa catgaaattg ttgctattgc acccacgcat gatagtccta ttatctTTTT 240  
 gaattctccc gactacacta tattggagaa gtttgccctt attaaggatt atattgatgg 300  
 attgcgtttt actactacac atgatgattt tgatagatat aatatgcatg tgcttgctgc 360  
 tcctacttgc aattattatg agagaggaac tacatccccg cctctccatg tttcccaata 420  
 tgataa 426

<210> 6724  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-007-Q1-E1-G8  
  
 <400> 6724

gacggggTgc gcgatctggg cgcggtgct gcggaaggTt ggggtcaagg tcggcgggaa 60  
 ccctaacgtg tacgcgagcc tccttggggT tctgtggTct tccgtggcaa acaggtggca 120  
 cctggagatg ccagacatta tagatggctc gatttcgatc atgtcaagga tcggccttgg 180  
 gatcggaatg tttaacacgg gcctgttcat atgtctacag gacaagctcg tcgtgtgccg 240  
 gactggacat accgtgttgg gcatggccat gaggttcgtc tctgctccgg gatccaccgc 300  
 tgtcggagcg ctacttttgg gactgcgtgg tgaccttttg cgtgttgcca tcttacacgc 360  
 tgcactgcct cagtctgtcg gagcatttat cttcgcgcta gagtatgacc tgcacgctga 420

<210> 6725  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-G9

<400> 6725

ggtcaagaat taccggggccg actatcacaa tgaccgggggt cttgtcgcca atgatccgca 60  
tctccatact cagcgaaaat agccgaacga aggtgtagtg cagcggatga aggttaaaca 120  
tagcaaagat gtcatcaaac cgcaggacga tcgtaccccc gatgtcgcca tccacaaaagc 180  
ccttgccctc tggcaccttg gccacgaaaa cggggtatgc cacatccttc tctctgagac 240  
gccgcttctc caaagaaaga aactgtcgt gcagactcct cctcgagata tcctgcggtg 300  
aagggtggccc gtcttgagca cggatcgtag tcggtgccgg ctggctcgca cccttcttag 360  
tctttctttt gtgtgcctt 379

<210> 6726

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H1

<400> 6726

cgggtcgacg ggggtgatgg agtcatactc gtcgtgattc aaatcaccgg agatcctagt 60  
gccgaacgga cggcacctcc gcgttcaaca cacgtgcagc ccgggtgacgt ctcccatgcc 120  
ttgatccagc aaggggagag ggagagggtg gggaagactc cgtccagcag cagcacgacg 180  
gcgtgggtggt ggtggaggag cgtggcaatc ctgcagggct tcgccaagca ccgcgggaga 240  
ggaggaggga gagaggcagg gctatgcat ggagagggtc aaactcatgt gttggcagcc 300  
ccaaagtcct caagtatata taggggagag ggaagggggg gccccccctt tagggtttcc 360  
cacccaaggg gtgccgcagc cccaaaccca t 391

<210> 6727

<211> 367

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H11

<400> 6727

aatgaacagc gacagcaagc tccaaaacat gagctgggtc tgctacacac atgtgaacac 60

gctgccccag acaagcatga ccacgtagta gtcttataat aaaaacacta ccgagttcag 120  
 gtggggaacc ctcgtcgagg atatcgaagt ctttacgcaa gtccatggat tagatcccaa 180  
 gcatagactt ctcttccttg aacaagtcaa tcagtggctt ggtgtgctag ggacacatat 240  
 agaatggagg tagcgagcct atcaaaccat accatacttc gcacatgcat gactgacttg 300  
 agatggttcc agaggaggca acattgactt tctcgaattc acgacggcaa cttgcatcaa 360  
 atgcaca 367

<210> 6728  
 <211> 336  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H12

<400> 6728

ccatcgtctc tggcgccacc gtctatggct acagaggaaa gagcattaag tctgcctca 60  
 tcggtggttc tagcctggca ttcacatctg ccattctgga cgttggcggt aacactacca 120  
 gagtggacaa tggcaaagcg taccatgcat acacaacgga aaagaagccc gaacctgcgc 180  
 attgatcaag gttgtctact tgtagcacia atcatgcaaa ccagctcggt gaatttttga 240  
 gctgatgtgt gctgttatgt ctgttttgct gatgcaccta gttcctttgc aaagctgtag 300  
 taacttgttt tgctcgaggg caatacaaca gacctg 336

<210> 6729  
 <211> 344  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H2

<400> 6729

ttccgttcaa aaaataactc tcccgaaggt ttcattctgt ttggactctg tttgatattc 60  
 cttttctttg aaacactgaa aaaggcaaga aaacaacaat ttgggctggg cctccggtta 120  
 ataggttagt cccaaaaata atataaaagt gtttaataaa gcccataaac atccaaaaca 180  
 gataatataa tagcatgaat acttcataaa ttatagatac gttggagatg tatcactttc 240  
 cttctgatta gattgctttt ccattctctc tcaagtactt gtagcacaaa gacctgtttt 300

gaagcgttgt ttttctagtt ttgcttgcta gtaaccggct tgat

344

<210> 6730

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H3

<400> 6730

cgggtcgacc ggagacacaa tggagtacga acggttctgc aaaatgggcc tacggccttc 60  
tctcaaggac atctgctgga acggtccgtc agaggaaaag cttccatcag tatcggagtc 120  
agtacctcca actccgtcct ccaagtcgac caaaagaaat gtcatttaag tgtgatatct 180  
tccgagctgc aattacaatc tattctctc tctctttctt ccttcctcaa agagctgaga 240  
ctttgctcac ttgagtatca agctttaggg ctctttgtta atcctttttg cagtttccct 300  
tttgtggtag caattgtagt atatggattt cctgttttgc tcaccaatag aagcacaaaa 360  
ggtgacagta ca 372

<210> 6731

<211> 439

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-007-Q1-E1-H4

<400> 6731

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tcagatctga tatcatggca ctccggccct agtgacaagc attaagcata gcaaaattat 120  
agcaacatca atcttagaac ataatggata ctagggatca aaccctacca aaactaactc 180  
gattacatga taaatctcat ccaaccatc accgtccagc aagcctacga tggaattact 240  
cacacacggc ggcgagcatc atgaaattgt tgatggagga aggttgatga tgacgatggc 300  
gacggattcc cctctctgga gccccgaacg aactccagat cagccctctc aagagagatt 360  
tgggcttggc ggcggctccg tgtcgtnaaa catgatgaat ccttctctct gatTTTTTTC 420  
tccccgaacg tgaatatat 439

<210> 6732  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H7

<400> 6732

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 gagttgtgtt gtgatatctt cccgtgagtc cctgatcttg atcgtaacacg tttgcgtgca 120  
 tgattagtgt acgattggat cgggggagtc acacaaacaa gatttcaagt gaccgaacaa 180  
 tagcacaagc aattaccata cgaactccac tttaactttg taacacaaac atatgcacaa 240  
 tatacaccca ttaacccgac agttcttgcg ccgacgcata agcaagacac aatacatact 300  
 cgtaaacgt gataccaaga gaacaagaaa ggtaaatcac ttaaaaatcg aatagttgtg 360  
 gtggtgtcac cttaaagaac aaacggacaa aaatgaaag 399

<210> 6733  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-007-Q1-E1-H8

<400> 6733

tcgacgggt cagttagatc ttctacagaa tatagtcctc atcagagatc ccgaggactc 60  
 cacaaagtac tatccccgct ttaacctgga agatacttca agttttaggg acttggtatga 120  
 acatagcaaa aatgtcctta gaagattata ccatgactat tatttcgttc gccaaagaaa 180  
 tctttggcga caaaatgcac tgaagactct acctgttcta ttgaactggt cggtatggtt 240  
 ggcatgtggg gaagatcttg gccttatccc tgcttggtt caccctgtta tgctagaact 300  
 cgggttgatt ggattgcgta tccagagaat gcctagttaa ccaggcttgg aatttgatat 360  
 tccgtccaag tacagctata tgacggtttg tgctccctca tgctatgatt gctc 414

<210> 6734  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A11



<400> 6734

gtccccgggcc gacgggggacc gcaaaatgga atgcctccaa gagccccgcg tactacaagc 60  
gcgggggacta tgtgcccgga ttgaacgttg atggtatgga ttttcttgca gtgaagcacg 120  
cttgtaaatt tgccaaagaa catgttcttg aaattggacc gattattctt gagatggaca 180  
catatagata ccatggacac tctatgtcag atccaggcag cacttaccgc actagagatg 240  
agattgcagg aataagacag gagcgtgatc cgattgagcg agtcagaaag ctattattga 300  
cccatgactt ggcaacagcc caggagctca aggacatgga gaaggaaatc aggaatgaag 360  
ttgacactgc aattgccaaa acaa 384

<210> 6735

<211> 126

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A2

<400> 6735

ctggtgtccg ctttgatgca gaaaccaaga tgggaatgga aacattttat gggtatatac 60  
aggacatatg ggaacttgac tattgacgtg gtttgacggt ccctttgttt cggtgcatat 120  
tggtgc 126

<210> 6736

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A3

<400> 6736

tttgacacgg gcaatggcca tccgcgagcc ttctatgaac gacgacctct tcatcgcat 60  
gatgcgcgac accgcaccaa ggaactgctg cactaagctg aaatagctgt tcggcttcgg 120  
cttttccggt cacagatgat ctacgacgaa cctcatggca agtccggaca atctattgag 180  
ttcggcccat tcggcaagct aatcagttag tggaagtgga tgctctggaa cgttaaactg 240  
cgaccagaat agcttgcca cttcacgacc tgtttgatct cggaagtatt cggccgcac 300  
gatagcactc gccgtcaa at ccggatatg 329

<210> 6737  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A5

<400> 6737

acaagctgaa aaggaagaca tcctaaggca gctgaaggag ctccaagagg gaatgaccac 60  
 tgaagagaag aagcctgtac agatagtgga agcgagtggc aaggccaagt ccaaggaaga 120  
 tgatcttgtt actgcaccct gatcttctgg aaatctttga cttgttgaca cttgctgtga 180  
 ttttatatgg ttgtaacgag aataatttct gatctgggta cgtgcacacg tttctgtgtg 240  
 cagtacagaa ctccctctat atacatatac agcttgagtg taagaatata aacgcccaga 300  
 aaaataaaat aaccacataa accaaaaaaa aatgcgtcgg ct 342

<210> 6738  
 <211> 239  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A7

<400> 6738

ggcatcgatt tctagatggg tgggaggata agatatgcag cagcacagtt cttttgtacg 60  
 ctcttggtat ttcttcagtt ctttcgtctt cagatcttct gctcaaaatc gccgggcgct 120  
 ctgcgcgctg ctagtgtgat atggtaatgt acatatgagt tttaacatga tatattgtgg 180  
 aactttttgt cgcaaaaaat aaaagcaaga tttcagattc aatgttcaat tctcaagat 239

<210> 6739  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A8

<400> 6739

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 agatggctcg ctacacaatt atatctggga atttagagtt gttagtttac cgtgctgctt 120

tcttttttgt gggtagatct aatgtctcta cgtataatag ataccgagtg tatgctgggtg 180  
 gttcttttcca ttcttttgag gtcgtgggtg ccatgtaaat gtttgtggat tccttatgtt 240  
 tttgcctcct gcggtaaata aaagctaata cagattcgtg gtcgaaaaaa aaacttaaaa 300  
 attaaattca tagttaaaaa caataaaaaa aataacccaa atgaagaagt tcaacaaaaa 360  
 aaaaaagcgg ccgccccaaa 380

<210> 6740  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-A9

<400> 6740

ctggaatata aaaagtgtcc acggagccga ctgcttagca agaggtggta cagcgggaag 60  
 gtacctaacc agaggtggcg atgctgacag ttagcagtct gcctatgctg gtggaagctg 120  
 cagtctaata cgacaagata tcagcacgcc gaccccgccg aaaggctaca tcacagcctt 180  
 ctgatccgat cgagatgacc aattcactca ccggcgcaag ccttcaggag atgcatcagg 240  
 atctaacgat tggcaaaccg ctcgccagaa cagatacggt tatatagttc ataacttcac 300  
 tcgcacgcat gaaatggact gcacgaatag cacattccag tgagtgttga cgtcccatgg 360  
 actgatatag cgggcagccg ggcaa 385

<210> 6741  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-B10

<400> 6741

ttcccgggcc gacgagcacc tgatgtgcga catcgagggc caccacctcg cctccggggc 60  
 catcctcggc cagcagggca ccgtctgggc ccagagcgcc gacttcccc agttcgggcc 120  
 cgccgagatc actgcatca tgaaggactt cgacgagccg gggcacctcg cccccaccgg 180  
 catgttcgtt gcaggtgcc agtacatggt catccagggt ggacctggcg ctgtcatccg 240  
 tggcaagaag gcctgtaggg agcaggaggc atcaccatca agaagaccgg gcaggcgctg 300

gtgggtggcg cctacgagga gcccatgacc cctgggcagt gcaacatggt ggtggagagg 360  
ctcggcgact acctcgttga ac 382

<210> 6742  
<211> 328  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-008-Q1-E1-B2  
  
<400> 6742

gcttcacata taattgtag agcgcgggca tatcttttgt agaaagaatt aaactctctt 60  
gcttcagtta tatcttttta gagagataac aggaattggt caatcacatg gttagtcata 120  
aattcctaca taaacttgta gatcgttgaa tctgatatgt ttaatttctt gcaatagttt 180  
tacgatataa aggtggtgat attagagtca tgccagtggg tggttgtgga ttgtacagac 240  
acttgtgttg aggtttgcaa gtcccgtagc atgcacgtat ggtaaccgtt gtgtggcaaa 300  
ttgaagcatg ggggtgttcct tgaatgtc 328

<210> 6743  
<211> 365  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-B3  
  
<400> 6743

ggtcgacgcy tacaacacaa aaatatataa atagttcata ataatgacaa tgaaactata 60  
tttagttcat tgcaagaaca aggagacaat cctattataa tttattacat tgtaaaaaca 120  
tcttggacca gtacgttggg atggcatggt gtgtaaacag ggaaaggat actaaggcga 180  
gaggcataga tgcgaccaac gagccggcca aaaaaaacca ttgccaaccg tgcacgcgaa 240  
gagcagtgat ttaattgatg taccaacaat cactcagata gaaatggaac atacacacac 300  
aaatagatgt gaaacatgcy tcaccncaa aagtgccacc gaaatgaaaa aaagagcctt 360  
gaaaa 365

<210> 6744

<211> 344  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-B5  
  
 <400> 6744  
  
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 agggggcggcg gccccgggct ctgagtgagt gaggctttgt gttgctttgc ttgttgtgaa 120  
 ctgggctggg aggttgcgtg atcttgtgtg tgccgaagc tttatgcttc caggatgtga 180  
 tgggtccgagc gatgcggaaa cggctactgta actgcatcat atgtttatgg tgtcgatcgc 240  
 cttgggtgat atcatcttcg ggggtgactc tataaacaat ggtgcttgag ctgtcatggc 300  
 aaaagtaaaa cattgcgggtg taatgctgca tttcaaagc gggc 344

<210> 6745  
 <211> 274  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-B6  
  
 <400> 6745  
  
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 catctccgcc tgtgcgccgt cgccgcgggt ctctgccgt gtccacaaga ttcctcttcg 120  
 ccattgtcgc accatgatat gctactgttg atactcgaac ctgagagcga aactgtgctg 180  
 tgaatcctgt gaaaaaactt acataaagac cagtatagtt atgtgttgat aagttttcaa 240  
 gttatgggta gtccttttaa ggactatgga ataa 274

<210> 6746  
 <211> 213  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-B9  
  
 <400> 6746  
  
 acgggaaatg gaagatagta tcgacatatg ttattctaca aaattactct atagatgcaa 60  
 cagctctaag taaactgcgt ataaatcatg tatgtagaaa gtacgtgtaa cagttgttag 120

aagttgagtc cttgtgtgat ggtgcggatg taacacagca tgtgattcta atcatccaca 180  
 tgcctcatca atcagtctgt acggataacc cac 213

<210> 6747  
 <211> 315  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-008-Q1-E1-C1  
 <400> 6747

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 tctatgcttc tgctgtgtca agcattagct tagttgcagc cttgctggaa ggatggattc 120  
 aggtgtgcaa gattgatgat gtacctgcaa acggcttcgt taatttttagg aaggatggag 180  
 tcgtgcatgg actggatcct aaccgactga catgaaaact tgaggctatt acacggattc 240  
 agctttgaaa cacggctttg aagtccgagg cgtgccttat gattttttgt gggctgggac 300  
 gataggttgt actgt 315

<210> 6748  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-C11  
 <400> 6748

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 aagaaggacg gggagcacia ggagggcatg atggagaaga tcaaggacia gatcagcggc 120  
 gacggccacg gcgacggcaa gaaggacggc gaggcacaagg agaagaagga caagaagaag 180  
 aagaaggaca agaagcacgg cgagggccac aaggacgacg acggccacgg cagcagcagc 240  
 agcgacagcg acagcgactg agccagctcc ggccgcgtgc agtgcagggg agatgaacgc 300  
 gtgggttaat ttggagcgtg tggtagcata tgtatgtaat gcttgacatg tctcatggat 360  
 cntgtaatgt aat 373

<210> 6749  
 <211> 271

<212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-C2  
  
 <400> 6749  
  
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 gtccgggctg ctcaacatgg tggacggcct ctggtccagc agcggccatg agcggatcct 120  
 catcttcacc accaaccaca gggaccggct cgacccggcg ctgctccggc ctggccggat 180  
 ggacatgcac gtccacatgg gctactgtgg ctctgctgcc ttcagggagc tcgcgggcaa 240  
 ctaccacggc atccanngac acccgctctt c 271

<210> 6750  
 <211> 364  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-C4  
  
 <400> 6750  
  
 atctcacacc ttctaagatc aaaccagcca ctacagatg atcactgtca gtattttctc 60  
 taccaagtgc tccgaggatt gaagtatgtg cattcagcac aggtcttgca ccgggacctc 120  
 aggccgagca acctgctgct caatgccaaag tgtgaactca agattggaga ttttggttg 180  
 gctaggacca ccaactgagac tgacttcatg atggagtatg ttgttactcg gtggtacagg 240  
 gcaccggaac tcctgtctaa ctgccccgag tacactgcag caattgatat ccggtcagtg 300  
 gggtgcatcc tcggtgagat tgctacgagg gaaccactgt ttcttggaag agattaagtt 360  
 caac 364

<210> 6751  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-D1  
  
 <400> 6751  
  
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gtacctgatt ctcggtgcta ccatttgtgc cgcatttgca gacccgctcg ttgatgctgt 120  
ccacaacttc tctaacgcca cacacatccc gtccttcttt gtctcgttca tcggcctccc 180  
gctggcaacc aattccagcg aggetgtctc ggccatcatc ttcgccagca ggaagaagca 240  
gaggacttgc tcccttactt tctcggaggt gtacggcggt gtgaccatga ncaacacacg 300  
gtgcctgggc gtgtccttag cgetca 326

<210> 6752  
<211> 142  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-D2

<400> 6752

acgacgtgat gtcgcacgta aagatctcgg tctggattat cgaggaagtc atctcatgtt 60  
cggataccta tagtgectac ttccacacag acgccattca tctacttcca cgctcactca 120  
tcttgacgca tccttcaggt tc 142

<210> 6753  
<211> 72  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-D3

<400> 6753

ttagaaattg taaatatgca ttgttgtatc ggcacctgaa tgaatgaaat aaacgaaata 60  
acgtctttgt tc 72

<210> 6754  
<211> 296  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-D4

<400> 6754

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agaaggacgg ggagcacaag gagggcatga tggagaagat caaggacaag atcagcggcg 120  
acggccacgg cgacggcaag aaggacggcg agcacaagga gaagaaggac aagaagaaga 180  
agaaggacaa gaagcacggc gagggccaca aggacgacga cggccacngc agcagcagca 240  
gcgacagcga cagcaactga accagctccc gccgcgtgca gtgcaaggga gatgaa 296

<210> 6755  
<211> 317  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-D7  
<400> 6755

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ttcggaaagg gaaggtttcc cactcatgga cacctagctg aatgcctgaa cctgaacctc 120  
gtttttcttc ttcttcttct tcttcttctc cttggtaatt ccttgttgat tccttctggg 180  
catgctatat tattgggtgc aacaacaaat tattgtcctt gttttgattt ccttcctgtc 240  
aagttcatcc tttagtgcta gtactagtgg tacatcagtt tgatttagga aaaacacaag 300  
cctctgctta acattaa 317

<210> 6756  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-D9  
<400> 6756

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caggcctcac cgccccaccg tactcccatc gctggcctag ccatccctct actcaccac 120  
acctgctgtt attctccggc gacggcagac gaaccagtaa accctcgtac agtcgtactc 180  
ccctccacgt gggaacaac tgcagagtct tccctgcctc cgtgtcgttc ctttcctagg 240  
cctcaccgtc gtccaccgcc ctgggtgctct cggcgcgggc ttatcaacat ggtcaacgac 300  
tgacatgcat ctgaagtgga ctgtacgtgg agaggccgac agctgggtcc acgaccgcac 360  
gcaaggaaat gcctccttaa taagccgcaa aatatgaatc tctcaacctg acatcaggga 420

cccaccg

427

<210> 6757  
<211> 155  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-E1

<400> 6757

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agacttctgt gactcgctcg ggtgcgaggc tggagggcgt ctgcagctcc agcaccgtgg 120  
gggtgtgccca aggtgccgga gtttacttgg ggggt 155

<210> 6758  
<211> 407  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-E10

<400> 6758

gtactagtct agaatgcccg ggccgacggg gatgatattg atatggcagt ttcattgcttc 60  
cccgaaatgc tggaaagaag aagtggcaat caggttggtg gcgctcttga ggtgcttgtg 120  
tatgggctgt gcaggaagaa agaagcaaag gaagcggttca aagttctgaa ggacctgggtg 180  
ttggaaaagg atgtgggttcc ttggcaaagt acctacaagt atttgatcca caagttgatc 240  
cgccaagggc atcttaaaga agcatttgat gtgctaggtt taatgaaaag taatggattt 300  
ccgccttata tcaatccatt tatcacacac attttgaaat ctggtactgt ggacgatgcc 360  
ctgggtctgc taaacgcaat gtcttcagag gagttcccat caagaac 407

<210> 6759  
<211> 279  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-E2

<400> 6759

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ctatcttgag ttttgtgttg tgaagttttc tagttttggg tgaattcttt tgatagatca 120  
tgggtacaagg agtggcaaga gcctatagct tcggattcnc atggcgcccc caagataatc 180  
caaggacacc aaaaattctt gtattatttg gggatgcnc gaaattatcn cctctttttc 240  
gtcaacttcc atcggttaatt tactttggag ctataattt 279

<210> 6760  
<211> 273  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-008-Q1-E1-E3  
  
<400> 6760

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agtacagggg tgtggataag cttcggtttt cgctccgctt gaagttggac gtgaaagaca 120  
cccgatgaga tagcctcatg tgccggcgag taccacgcac gttgggtgga gttgcataaa 180  
agaaaggcaa tgtgctaaag gtcttctcta ttttttttaa tactggcctt cttctgtttt 240  
tacattcttc cctagtttga taatgcttct ttt 273

<210> 6761  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-E4  
  
<400> 6761

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ttgactgttc atcgcccccac ctgaaagaa gcgaaacgcy tatacaataa cctaacacag 120  
ctctattatg agacggaatg ttctattatg ggtgaagtct tacccttgt ggaaaatgtg 180  
acaaagtttg agcaaagtac agaagcaagg gaagagaaca gtgtggcccc tgaggaacct 240  
atcttgact catcagattc gcatgaagca atggccatac catctaataa tgcaacaaca 300  
actctccatg aagctgcaaa agctggcaat gttgaacaaa ctatggaatt gctccagcaa 360  
ggtttgatt cntgtatcaa agatgaaaga agaaagacac cttacctgct ggcttccgac 420

aaagaagtag aaatac

436

<210> 6762  
<211> 315  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-008-Q1-E1-E5  
  
<400> 6762

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tgaggcagat gagtttgacg acaagatgaa ggagctggag ggcctctgca accccataat 120  
cgccaagatg taccaggggtg cgggagctaa catggcgggt ggcattggacg aagacgatgc 180  
acctccggct gctggcggcg ctggcccca gatcgaggag gtcgactaag cgagcacttg 240  
taccagtctt accctaaagt tattccgttc gttatgttgg atgctactgc agtacgtggt 300  
gttggatgtg atgtg 315

<210> 6763  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-008-Q1-E1-E7  
  
<400> 6763

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ttcgtcgaag cgacgtaatg ctggcagtgg tctgttcacg atcgccaaac gtatgagaaa 120  
ataattggct tactcgtagt gtatcatgcc tgtctgtcat tatagcatgt tccgttcaag 180  
tttatgtgta gctcacgttt cgacattttg cttggcaacc ctgtagtgca tcacttgcta 240  
ctgcttttct atagatctgt tcgctgtgaa aaaacaaaaa tacaacaga aataaaaaaa 300  
caaaaaaaaa aaaaaaaaaa taaaaaaatc caaaaaaaaa acaaaaaaaaa aataaaggaa 360  
aaaaaaaaagg accacgtcaa gaaaaa 386

<210> 6764  
<211> 337  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-E8

<400> 6764

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gaccgtgtca agaatatgac tggcctggta gaaatgtatg ggcggaatcc tcgcctacag 120  
gagctggtaa acctagtggg tgtctgtggg gaccatggaa aggtgtccaa ggactacgag 180  
gagcaggcag agttcaagaa gatgtttgat cttattgaac agtacaacct gattggacac 240  
atccgctgga tctccgctca gatgaatcgt gttcgcaatg gtgagctcta acgctacatc 300  
tgccaaaatg aaggaacctt tgttcaacct gccttcc 337

<210> 6765

<211> 320

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F1

<400> 6765

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aaggagtgga ttatttgga attagaacct tcagatttct tagaacttca cttggattta 120  
tgtgaatata agcgtaagag gtctagtggc aatgctacaa aatcactgca ggcgatataa 180  
taacgttgta gatagacgga gactgaatca gttgacacta ctttgatgtc tatcgagcca 240  
atgggacaac atagaataga agaaccggaa gcaggttatc tatcttcacg agcaagttgg 300  
cgtctgtaaa ctttcaccgg 320

<210> 6766

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F10

<400> 6766

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ttattttttac catttcaaaa aagaaatgta aggacgaaat agaactgccca taaacttta 120  
gaaattgtta gtgtatttca aaaatgttca acatgttttt ggaaaatgtt tcacatgtgt 180

taaaaaatta taacgtgttt ttgaaaaatg tttgtcttgc gcaaaaaaat tttacaccag 240  
gtatttttaa acaagttcaa cgtgtgtgaa aaagttcttt tgtaaattac cctttcactt 300  
atacaaacat gggtgtcatt tttaatccta aattttacac attaatttca aatataggcg 360  
aaaatattta 370

<210> 6767  
<211> 308  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-F2  
<400> 6767

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gggcgggata tccggcgccg ggcctagcag cccaagtcg ctccggtgcc ttgcagagcc 120  
gaaagtggtc aggaagatga ggggtggcgc cgagaagact ccgattcagc acgtccttca 180  
gccgccgaac atcgctcct tgctcgccat catcatcggc atgggtccccg tgctcaaggc 240  
cttcgtgttt ggggctgatg cgccgctctc cctctttcac gacagtttgg agaatctccc 300  
tgctgctg 308

<210> 6768  
<211> 297  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-F3  
<400> 6768

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gcccattctca cgttcggggt cgtgtaatgc atgcatgcat gcacaaataa ttcggttcagc 120  
ttcagggtct atgatctgga ctagtatttc acgtcggttg ttcgaaatat cccaatgatt 180  
agtaaactcc actacatcta cattctatta ccttttaatt gcgcgattat agcccaaagt 240  
atgtttccac gagcacatat gatgctaatt attcataaat acaatcctat ttgcatg 297

<210> 6769  
<211> 253

<212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-F7

<400> 6769

gacgggggat ataacgaaca caatcgttcg ctagcttcta ccgttctata accaactact 60  
 cttgctccaa tctggtatct gtctctatcc ggttccgtaa gactgctgga taccagatcc 120  
 cccactccca gcgagtatcc tgggtctcatc tcacattcat ctcgcctaag ccgtcttctc 180  
 tccatccact actgacgatt actgcgggac agcgtggcag caactcattc gatgtcgtcc 240  
 ggcgctcatc ctc 253

<210> 6770  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-G1

<400> 6770

ggtcaaaaat atccgggtcg acgggggttct taagaactta atactctaga tgcattgctgg 60  
 atagcgggttg atgtgtggag taatagtagt agatgcagaa tcgtttcggg ttacttgtcg 120  
 tagacacgat gcctatatac aagatcatgc ctagatattc tcataattat gcacttctct 180  
 atcaattgct caacagtaat ttgttcaccc accataatac ttatgctatc ttgagagaag 240  
 tcactagtga aacctatggc cccgggggtct aatctccatt atattaatct cccgtcaaca 300  
 agctatttat gtcgccgttt attttgcaat ctttactttc aatctatatc attaaaatac 360  
 aaaaataatt aacc 374

<210> 6771  
 <211> 298  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-G12

<400> 6771

cgcatctcat ctaattcctg gatatgtttg cgtctatggc gttctccatg gaatcacgag 60  
 tcgtaagcag caagtaggaa tctatcatca aagggtctaa cagagactga ttttaccaca 120

gggtgataga cggttattagt cagtggacag ggtctactaa gtggtattgg atcatgcttg 180  
cataggtatc acattactct caacatagac agcatatgta ttgatactaa aatgcacagg 240  
aacagtacgt gttaccttaa ccttgctgct gttattgaaa tattggatgt agtaaaga 298

<210> 6772  
<211> 331  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-G2  
<400> 6772

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tgcatatgca tgcacgaac gcctgcccc tgtacatgag ataccgatcg aggtanacgt 120  
aatgtgtgta cggaacgtgt gatgactgat gcttgcaaga tcagcanacc ttcgctgctc 180  
cggtatcacc ttctgttctt ttctggagtt ctcttttccc tggtaaata ttaagtgtat 240  
gttgtagatt gtgacattga ttaactggaa aatgtatcaa tcagatccca ataaactgcg 300  
tcggctttgc aaaaaaaaaa cttccaaggg a 331

<210> 6773  
<211> 324  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-008-Q1-E1-G3  
<400> 6773

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aactttccac cggtccgtta ttatgacacg cttcatcatt gtcacattgc ttgcatgac 120  
atgtagttga catcgatatt gtggcaaagc caccgttcac aattcttcac acatgtcact 180  
catgcatcat tgcacatccc ggtacaccgc cggaggcatt cacatagagt catattctaa 240  
gtattgagtt gtaagtaaat taaagtgtga tgatcatcat tattagagca ttgttccagt 300  
gaggaaagga tgatggggac tatg 324

<210> 6774



<211> 351  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-008-Q1-E1-G5

<400> 6774

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agctgagctc gttccagcag gagatcgtgc agctggcggc ggtgctgaac ggcgaccacc 120  
agctaagcag cctgcaggag aggatcaggg agaggatgaa cgtgagggaa ggcacctcct 180  
acatgaggag cgccgtgcgg cgcttcttcg aggcgggcat gtcggccaag aggatgggccc 240  
tcgccgacga cgagcagatc gtcaagatga ggccctccct taccaccaga atgacctcct 300  
cccctgcaga tcaagatgat agtccgtana gagcancgat gcatacatat a 351

<210> 6775  
<211> 338  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-G6

<400> 6775

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aaagtagcaa tcacacactt attacatcaa atgtctcaaa cgagaactta ttacaataaa 180  
tatggcttaa gggcatctaa ataagataac agcggaaggc ttggaagata aagtgagtc 240  
atcaactcca acgcatagc tgagtgcacg acaaacgacc tagcgcaacc tactcttcgt 300  
ctgaaaagtc tgcaacatga catgttggtta cccgaaaa 338

<210> 6776  
<211> 275  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-G8

<400> 6776

ccgggccgac ggggtccgtc aagaatggcg gcgcatgac cgagaccagc agatgaattc 60

cagccggtcg atgccttaca ttgttcgtga tcggaattca gaggaggact ctgttgctga 120  
 gttgctgctg attacaattc agaagaggac actgttgcta gctgttggca tcacagagcc 180  
 acaggcgtgc ctgcactgta tatcgatcatc ggctaggaat aggatggccg ggaaaatatc 240  
 tggtgatacc ggagctaaaa tgctcccatg atacg 275

<210> 6777  
 <211> 265  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-H1

<400> 6777

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 ccactggatg tggttttgag ggatttttgc agtgggggtt gtaggggtgct atgccgcgct 120  
 gggtttggga tttgaaataa aacgaaggga gatgtgccac gctcttaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaagc ggccg 265

<210> 6778  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-H10

<400> 6778

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 ggtgcagcgg gtggtggtgg tggaagacgc gcgagcaatt cattaaatct gttatcgagc 120  
 tttgtttcga acgtcttctc aaggccagtg atcttctcca tggcctcttc aaaattgttc 180  
 agcacatctt gcacctgttc agtcatcatt tgctgaaact tatcatgaag ctccctgttc 240  
 gataaattct cccagtcaat ctcgctgggt tgtgatcctg gcatgggttag cagcaataga 300  
 aacacacaag aatatgattc tacagactac gaacaagtgg tgggtggtggg tgtgatgagg 360  
 acatgact 368

<210> 6779  
 <211> 315  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-H12  
  
 <400> 6779  
  
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 ctcaagtaca gttaccgatg gacgaagacg aacgagggga tgcctcccgg ggcataacca 120  
 agcttaggct tttcgatgtc ctttaatttt accttggggg gccttgggca tctccaagct 180  
 taggctcttg ccattcctta ttccataatc catcaaactt ttacccaaaa cttgaaaact 240  
 tcacaacaca aaactcaaca gaaaatctca tgagctccat taatataaga aaacaagcca 300  
 ccacttaagg tactg 315

<210> 6780  
 <211> 55  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-008-Q1-E1-H2  
  
 <400> 6780  
  
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<210> 6781  
 <211> 314  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-008-Q1-E1-H3  
  
 <400> 6781  
  
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 ggagacgtac gatgggagtt cggccaatgc gaactgatac ggaggatagt gtacggcgaa 120  
 ctgtctatgt ctcagacatt gatcaacatg tcaactgaaca gaagcttgct gaggttttct 180  
 caaactgtgg tcaagtggta cattgccgta tctgtggtga ttcaaactca gtgatgcgtt 240  
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acaattcttg gttt

314

<210> 6782

<211> 295

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-H4

<400> 6782

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catgtgcgcc tcctccgcac gggcggagac gacaatgaca cgctagtcc tcctcgccag 180

cgtgttgag cagcgcctca tcctcctctt cgtacgctgc gtgcatagac gcggctccac 240

cagctgctcg cgtgcttggc agcgcggcgg catcgcgagg agggactgca gatga 295

<210> 6783

<211> 287

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-008-Q1-E1-H6

<400> 6783

tcgacgggga tgaatacaaa tatagaaaaa aagttctgta ataatgttgg aacaatgaaa 60

gtatttaatg attgtcttcc ttatgaatgg tggactgaga cgaacgatgg tcttttccta 120

aaaatctatc cccctagggg gtatgcgcgt actactttgt ttcaatgact aggagatttt 180

tggagttaag tatgtcagtt ctttatcact aatgtttagt ccacggatta tacgcactca 240

cactcttcca tcagtgcctat tctttcaagt tccgggcaag gtaaaac 287

<210> 6784

<211> 311

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-008-Q1-E1-H7

<400> 6784

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 tgcgaactga tacggaggat agtgtacggc gaactgtcta tgtctcagac attgatcaac 120  
 atgtcactga acagaagctt gctgaggttt tctcaaactg tggtaagtg gtagattgcc 180  
 gtatctgtgg tgatccacac tcagtgatgc gtttttgctt ttatcgagtt cgccgatgat 240  
 gtcggtgcac gagcagctct aacgcttggg tgaaccatt catgggtttt taccctgtca 300  
 aaatttctgc c 311

<210> 6785  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-A1  
 <400> 6785

gtaccggtca accattcacg ggccgacggg ctaccagaga gttagttacc catgggccgc 60  
 aacatggcgc ttcccctgct cctggcgctg gcggccctag tggcgctcgt gccgtcgggt 120  
 tccgtcgcga cggcggggac ggctggtgcg ttcgacagct ggttgtcggc gaaccagaaa 180  
 gaattcgcga tcaaccaggc gttgtacgcy aagaaggcgg tgggtgacac cggcagcacc 240  
 atcgacgagt ccctgtccaa ggcygaggat aacaagacca cctacgtggt ggacccaag 300  
 ggcggtggtg actacaagac catcacggcc gcgatcgacg ccatcccga gggcaacacc 360  
 ggtcgcgtaa tcctggacct gaaacccggc gagtaccgtg agaagatctt cctcaaactc 420  
 agcaagccc 429

<210> 6786  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-A2  
 <400> 6786

gaggggaggt aagcgagctg cgtccgccac gccgccaaact cgctctccgg cggctcgtc 60  
 gteccggcgt ccttggccac tcccttgctt ctgctggtct tgggtgccat ggcggctcgc 120  
 ggcagcaagg gacagaagac atcgaagaca cagcggcggg gagcaaaggc gaagacttac 180

gaaggaagga gaatgggatg gcggttccga gattggggaa ggcacggagg gtaaattgagc 240  
agcgtgcccg cggttattcc tctttacggg gaaggcgcgg gccgcctctt ttcccattaa 300  
ctgcgacatg acgcatgcgt gtgagaaccg cccacgcgt gacccccaca tcatgctcaa 360  
ccctccacgt cgcgcgttca acgcggtt 388

<210> 6787  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-A3  
<400> 6787

aaccatattt taatctctca taataattac atgtaggacc ataataaaat tcaacaatgt 60  
agccatcata taaaatcttc tcttcatgat ccacatgcat aaaagtttta taatcttcca 120  
aaatagtggg attaacatca aaccacttt cataaaaagt ttcataagat tgaacactct 180  
ccaaatatgt gggattactt ttacctaaag ttgacgctct tccaacccca ctttcaatat 240  
taatgcaaac attattatca atagcatatt catcatgagg cataaacaat ttttcaagat 300  
cataagaaac gtgatcactt caatcatgat cattgcaata agtagtggac atatcaaaat 360  
tagcatcccc aagcttgggg ttttgc 386

<210> 6788  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-A7  
<400> 6788

gtcccgggcc gacatgggag acatgctgat gatggacagg ttccgtcaat ggcaggccac 60  
gcacaaccgg togtacctga gcgcggagga gaggtgcgt cgcttcgggg tgtaccgcga 120  
caacgtggag tacatcgacg ccaccaaccg gcgcggcgac ctacacctag agctcggcga 180  
gaatgagttc gccgacctca ccaggagga gttcctagcc aggtacgcgt cgtcctacga 240  
tggggtcggt gatgatactg gcatcacgtt gcctgtgggc ggtggcgacg ccgagctgtg 300  
gtcgtccggc ggcgacaatg atagctcctt ggaggctccg cctcccagct gggactggag 360

atccaagggc gccgtcacac cgggtcaag

388

<210> 6789

<211> 385

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-B1

<400> 6789

gggtcgaggg ggaccacaag gagaagaagg acaagaagaa gaagaaggac aagaagcacg 60  
gcgagggcca caaggacgac gaccaccaca acaccatcat cgcattccat tagcattcta 120  
ccattttcct cggagagaag tagccagaaa cagcagcgcc atggccggca tcatgcacaa 180  
gatcgaggag aagctccaca tgggtggcgg cagcagcgag cacaagaagg acgaggagca 240  
caagaaggcg gaggagcaca agaagaagga cggggagcac aagaaggacg gcgagcacia 300  
ggagggcatg atggagaaga tcaaggacaa gatcagcgcc gacggccacg gcgacggcaa 360  
gaaggacggc gaccacaaag agaag 385

<210> 6790

<211> 418

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-009-Q1-E1-B10

<400> 6790

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tgaagcggat cgagaacaag atcaaccgcc aggtcacctt cgccaagcgc atgaacggcc 120  
tgctcaagaa ggcctacgag ctctccgtgc tgtgcgacgc cgaggtcgcg ctcatcgtct 180  
tctccaaccg cggcaagctc tacgagttct gcagcaccca gagcatgacg aagacactcg 240  
acaagtatca aaaatgcagt tatgcaggac ctgaaactac tgtgcagaac cgagaaaatg 300  
agcaactgaa aaacagccgc aatgagtacc tgaaactaaa ggcacggggt gataatttac 360  
agcgaacaca aaggaatttg cttggtgaag atcttgattc attangcata aaagagct 418

<210> 6791

<211> 300

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B11  
 <400> 6791  
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 ataatgttgc tactggagca gtttgtacaa tttttgacct tctttactga acattcgggg 120  
 ataggggatgc caccctggat gcatctctag atctgtggat gtatgtgtgt aatcatcact 180  
 gtatttaggg tttgaggcgc taatttagat gttcggttacc ttgatgttcg atggagaaca 240  
 aattactatt tctgaaatgg cgggtcaatac acagagccct tcagtgttaa caaagaatac 300

<210> 6792  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B2  
 <400> 6792  
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 gggttgaaga tgtccaaggc gggtaccaag aagatgcaga agctcaacgc ctactgacca 120  
 aactcaccac ttcgccggag gggtttgatg gggttgtgct ccaggacggc atcatccgcc 180  
 acaggggacg agtgtggctg ggagcaaatt tggttttgca aagacaggtc cttgaagcgt 240  
 tgcacacagg cgctatcggt gggcactctg gtttcaatgc cacgtaccgg cgtgtgcgac 300  
 atctcttcac ttggccgagc ctgaaacatc acgtgaagtt attcctcgaa gcgcgccaga 360  
 cttgcaagca agccaagcca gaaaggattc gttaccggg attga 405

<210> 6793  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B3  
 <400> 6793  
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 tcgcttttta tgcttagcta ggggcgttaa acgatagtgc tagttgggag gcaacccaaa 120



ttttctttat gtttctagtt ttttttctcc tgtttaggaa taaatcttgc atctactctc 180  
 tatttagatg tgtttttata ttttaattag tgtttggtcc aagtagaacc tataggataa 240  
 cctacgatga tagttgattt gattctgctg aaaaatagaa actttgcgcg cacgaatata 300  
 attttgtaa atcacaggaa cgtgcttttg agttgattct ttttctgct gttcaataga 360  
 caaattgtcc atgacttcct attttggtag aagttttaga g 401

<210> 6794  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B4  
 <400> 6794

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 aggatgatca acatgtaact tgccttggtt ctggttcata aagtcacact cctgacaata 180  
 gctcgcgtcg tactccggaa aatctacacg tttcacacaa ttcaacaaat caatcaccca 240  
 aacacgaata gaacccaaac aaaaccaaca gcaagaaaac cattttttaa actcaacaac 300  
 agaattctaa cagcacctaa attgctctat ggtcacaatg caaaaggaat cactaaattt 360  
 cgttaaacgg ttgggaagtt acggcctcgg aagatttgat taaaatccga ac 412

<210> 6795  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-B7  
 <400> 6795

cccgggtcga cggggaattt gaatttaatt caaaatttac tgacaagatg aggagaatta 60  
 agatacctct gcctccagtt gatgagaaaa agaaggtagt tgaagatggt gacaaggatc 120  
 gaagatacgc aattgatgca tccattgttc gtattatgaa gagccggaaa gtcttggttc 180  
 accagacact agtaatggag tgtgtggagc aacttggtcg catgttcaag cccgacttca 240  
 aagcaataaa gaagcgcatt gaggatctta taaccagga ttacctgtag agggacaagg 300

agaaccagaa cgtctaccga tacttggett gatcatctgt tctccatgct gggttcggta 360  
acagtatgac taccaagcta ctgctattta aggatgctat attttgtgcc aaggcacaac 420  
gc 422

<210> 6796  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-009-Q1-E1-B9  
<400> 6796

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ggatctgact ggagatgggt gccggcaggc tggagctcct tgcagcttcc atggcatact 120  
cttgcaaga atagagaggg cgggagatac tagagtgaga aagaaaagag gaaccaaggg 180  
aggaagggga caggaagaga agggagcgga ggccggcctg ggggagctgg tcgccggcac 240  
gacgtccggt tgagggagag gcggcgggat cgacgcgcgg gcgcagaagc tcatgtgcgt 300  
gctcgcacac gagcgtgagg ctctttcctc ggttggttcc tagaggcagc gcaaggacga 360  
ggtangggat tgcgcgaggg acttggcggc ggggctgggc tgaaactgct gct 413

<210> 6797  
<211> 419  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-009-Q1-E1-C10  
<400> 6797

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tttaacttgc aaatcatgac attgctcgca accttttgga atgtatttgg atatcactga 120  
atatcaatta tttcttcata aattaattat ttaaattcaa gacttgcttg cgctatagga 180  
tcccttcaac atggtacaag ttgcatgata cctcgtgata tcattgttta tcagttcatt 240  
tcctgttaat tagttaaata tcttagttat cgctctacct taacagtacg ctgctacagc 300  
ctacaaattg tgataatctg tttgttcac ataatacact tacacttctg aatcatcgct 360

tggtacaaat attttaaggc atgcgatcta attcttgatt gttttgcagc ttactaaaa 419

<210> 6798

<211> 306

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C12

<400> 6798

ggtcgaaaat tcacgggtcg acggcggggg tggcggcgcc gaagacatga acgacgatga 60  
ttgatcgtag cagcctcata gcactcttca cttgaaacaa gggcgtcctt ttgacccccg 120  
caacaatagc tctcttgtag ataggcactc tccgggtccag gatagttgag tggatgatgt 180  
ggtgttggtg taaatgtttg ctgtgggtaa aatgcgttca tctgatacta tggtttacac 240  
atccctgttc ttggccaaag aaagaaagaa gacgacgatg aaatcgagcg gtttcgcgtg 300  
tttttg 306

<210> 6799

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C2

<400> 6799

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gaaaagaaac ccgatatcac gaaacgacca cacgctccta ttgaagatga ggtggaatgc 120  
aagaagccaa agatagcaga aggctcaagg tgccaaggag aagaacctga ggctggaggg 180  
ataaagaatt cctcctgggt ctgatgacag gggaatgcag taaacaccag aagcatcaaa 240  
actatgatct ggaacagtat cctgaataaa ctatcttctg gattatgaat gaattctgaa 300  
gcatggggct ataagtgaat tatgtaacat ggatttgtaa ctatgggtgga tgttaaagtt 360  
aacgttctat cagtaaatcg tgaatgcgtg cgc 393

<210> 6800

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C4

<400> 6800

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acctggagaa gctgctggac ctggtggaga agagctgcca ccaaatacac aaggagacga 120  
tgatccacaa ggcggtgctg aaagcctgaa gtgaacaatt ttgaattgaa tgtggccttg 180  
tttaggttgt gtgcgtagta gactttctct atggatctga attcactttc actgtatggg 240  
taaaactatt ctctctgctc aggtgggcat cgctgtttg ctttggaac tcgtgtgcga 300  
accggtctcg aaatactgta accacaggga atgacgaatg ctatttgctg tatttttctg 360  
aacattattt gtattctttg gcatcaactc ttgctgaacc tggatgtatc tgc 413

<210> 6801

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C8

<400> 6801

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ggaagagtgc tgtctttgca ggatggagta gccatcgctc tgagaatcct gaactctggt 120  
gattcaccgg ttacatagg atcctgtatt ggtgtgaacg agccaactgc ctactagta 180  
actcagagtt ttgttaaggc tatgtttgag cgagcaatgc cccatttgcg ttggtcatac 240  
acttcccaga acatggagaa catgaagcgc atgtttcaca aggtccatgg catgcccac 300  
tgctgtggtg ttgtacatac aacgcgcac agatttggat cacagaaccg tgagcatgtg 360  
gagaatggaa gcagtgtcat gcaagccggt ccttgatccg ggaagggggg tc 412

<210> 6802

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-C9

<400> 6802

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gggccaaata tatggcccat ttggccactc ggcccgaagc atctcggctt ccaatgatct 120  
 cggcaagcgg tgcattgcag acaacagtga ttgggtgctc ctgaaaagag taaaatgcat 180  
 ccgtgggcat cgaacttggt tcgaaagctc actttgggtca ttgtacttaa gaatacgatc 240  
 aatatgggtca ttatatacga cttgggggtga ttatacagtc actgcctcac tgtatagctc 300  
 tgtattttgc tctgttgact ggtcaaacat cacaattcac aacaccctct ctctatccta 360  
 tgagggtccc acttgtcagt tgacctctgg cata 394

<210> 6803  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-D1

<400> 6803  
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 ccttgataga tgtattgggt tttgcttgggt tttctgtaat taactgggca acaatcttct 120  
 taattaatag aactggtaaa gcttttgccc gtgtttaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggcgcccccc aaaaggatca 360  
 aaactttata gcggtctaac aaaataaaa acccttctaa aagagcccc 410

<210> 6804  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-D11

<400> 6804  
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 tggatgatgc tgatgacata tacatgcggt catggactgg caccattatt ggtcctcaca 120  
 atactgtcca tgagggtcgc atctaccagc tgaagctgtt ctgtgacaag gactaccccg 180  
 agaaggcacc atctgttaga ttctattcaa gaatcaacat ggcttgtgtt aatcacgaga 240

ccggggcggt tgacccgaag aagttcagtg tgctggcgaa ctggcagcga gactacacta 300  
 tggaacatgt cttgaccag ctgaagaaag atatggcggc gacgcagaac cgcaagctag 360  
 tgcagcctcc agaagggaca ttcttctagc ggggtgtttt cctgcccata tccagttcca 420  
 ac 422

<210> 6805  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-D2  
 <400> 6805

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 gatgacatga taagatgcaa cacgcaagta gaatgacaag gcaacaacag cgaataactg 120  
 gaggacacct ggcacatcgg tctcggggcg ttacattcaa gtacaagttc cagaaggccg 180  
 ttcttgccaa cttctaaacc catagagttt tcttttgaag caccacactg gagtctaggc 240  
 aagaccatgg cagcccacat taccatggga cgcattggag aggtctacaa caggagactt 300  
 aaggacatta tctaccaagt atgtgggcgc cgagacgagc aatgggaagt aatcagcacc 360  
 aggaaggata gatccattgt agctttcatc caggagttaa accagcacat 410

<210> 6806  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-009-Q1-E1-D4  
 <400> 6806

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 tacgctccga taccctgttt gtttaaattg tttgttgta tcacctgtag cattagtaat 120  
 gtttgcatgt tcatagatag acaactgtca gggttatatg anggacatcg tctttttaac 180  
 ttatatatgt gttggaatca ttttgcttac atcaaagaaa ttttcagaat tttaaattat 240  
 gttaacacaa taaaacaaat tgtaaggtc aatataaaaa atgttgatgg cattcaaaaa 300  
 atgtttgtga catttaaaat gtttaacacc tattaataaaa atggtcaaac acatatattt 360

gcaaattggt agtcttgat ttt

383

<210> 6807

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-D9

<400> 6807

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cctccgtcgg ggttttaggt tcccgaacga tctttttgtg agagggatca tgttttacta 120  
tgggttgga ttcacgact tggctccga gtccatcctc catattttcg cgtttattgt 180  
tgtctgcgaa gccttcctcc gtgtcacccc ccacttcggc ctgtggctga agaccttcaa 240  
tgtggagccg aagatgatcg gggggtgtca agcagagtgc ggcggggcgg ccgtaagcaa 300  
gagggctgat gcctcgtggc ccgagggctc cttccaagag gagctcggct tgtggttcta 360  
tatcacgct ccgaagagca gcaggtagaa gccgctgcct ccattccgct cgggaactcc 420  
acg 423

<210> 6808

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-E1

<400> 6808

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caacttttaa aggaaacact tcacgttttc taaaccatag ttgtgatccc aactgtaaac 120  
tagaaaagtg gcaagttgag ggtgagacaa gagttggtgt ttttgctct cgtttcattg 180  
aagttggaga gcccttaact tatgactaca ggtttgtgca ttttggcgag aagggttaagt 240  
gccattgcgg agcaaagagt tgccaaggat acttgggcag ccaactaaag aatccaacac 300  
agaacgtctc tgcggctgcg gcgcttgaga ataagttgct cgtgcaacag ggcggctgct 360  
ctccttcaag ggtcaaaaca gagactcgcc tggtaccctg gaccaactg 409

<210> 6809  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-E10  
  
 <400> 6809  
  
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 cctacatata tgttcgttcc ccacgctgat gttgctcttg tgtattgctg ctgctgcccc 120  
 tcttttttct cateccacag aggcaagcag tggctgttat gcattctatc gccttgacct 180  
 tcgcaatcct gaattctgta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gtaaaataaa 240  
 aaaaaaaaaa aaaaaataaa agaaaaaat aaaaaagaat aaaaaaaaaa aaataaaata 300  
 aaatataaaa ttataattaa ttaattaa aattaaaatt aaattataat gaattaaaaa 360  
 aaaaaagggg gcccccaaaa 380

<210> 6810  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-E12  
  
 <400> 6810  
  
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 tctttctttt tgttcctgtt tagtaataaa taatttatct agcctctatt atggttgtgt 120  
 tttttgtgtt taactagtgt ttgtgccaag tagaaccttt gggaagactt gggggaagtc 180  
 ttgttgatct tgctgtaaaa aacagaaact ttagcgctca cgagattagc tacaactgtt 240  
 tactggagag ttatatttag ttgattattt ttgaagatga ttaatagata aatccctcac 300  
 gtccagaaat ttatttcaga attttttgag ttccataagt agacgtttga tatagattac 360  
 tacagactgt tctgtttttg acagattctg ttttctatgt gttgtttgct tattttgatg 420  
 aatctatgag 430

<210> 6811  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-009-Q1-E1-E2

<400> 6811

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tggaggacca gcagcaaagt ctctgaagcc caagttcaac ctgtttgtca agcaggtgtc 120  
cgccggcatt gggatggcgg tgccacacat tgacatcaag tctgtcattg ccttcaccat 180  
gtttcttaaa gcctttggtg gtctcctttt catcatcagc agctcgttcg gagcgctcgt 240  
actgcttggt tacctggcat tcataacccc tgctgtgtac gacttctaca actacgagat 300  
ggaatcccag caattcgcca agctcttcac catgttttca cagaacctgg ccctcttcgg 360  
cgcgctgctc ctcttcctgg gaatgaagaa ctccaaccc 399

<210> 6812

<211> 204

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-E9

<400> 6812

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atatcacgaa tatgtatggc tagataggat ctccctgccg caaacctcaa tttagtttaa 120  
aactctcagt ctcttcagta ttaaagtgat tcctgtactt tagcgatggg acacattgca 180  
tagttaactt taccatttcc tctt 204

<210> 6813

<211> 277

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-009-Q1-E1-F10

<400> 6813

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atgcattcgc cgtgtcagca gccaggcgac gcggagggga tgaagggcag agagagaaca 120  
tgtttctgtc tangtcatcc tgcttactta ngggaggtgg agggcccgac agaaggcatg 180

caaatattga agagggccga gactaatttg ttaacgggta tttttaaggt ttattgtctg 240  
 tttatttcta ttttatttca actttctata catacat 277

<210> 6814  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-F2  
 <400> 6814

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 cctacacttg atgacagatg gaattgaagc gtctcttgat gtgtttgggt ctcttgtaaa 120  
 atctggattc ctttgccaag gcaagtgcac caatattgtc acaaaagatt ttcattggac 180  
 ccgatgcact aggtataaca cctagatcgg atatgaactc cttcatccag actccttcat 240  
 ttgctgcttc taaagaagct atgtactccg cttcacacgt taatcccacc acgacgtctc 300  
 gcttggaact acaccaactg acagctccac cggtcaatat aaatacatat ccggattgtg 360  
 acttagagtc atccggatta gtgtcaaagc ttgcatcgac g 401

<210> 6815  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-009-Q1-E1-F4  
 <400> 6815

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 atgcacacta ttcaataatc tacttatgtt atccagaaca taaatacttc acacactttt 120  
 gtgttttgtc caattgcacg tgtatgggac atttgtacaa tccacatatt aagataacgg 180  
 aaaatgacaa gtttacgttg tgtccaaaaa gtcctctcac gtcacttttg ggccatgata 240  
 agatatagtc caagtctctc acgttttgga ttcagattcg gactgcatag acatacctga 300  
 ctcataacac caacaacttt ttcataccga ctccgaattg ggtgattctt tttttgttgg 360  
 aaactacatt tcgtgctctt tccaacccaa tttgattcac cttcaaatt 409

<210> 6816

<211> 358  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-G10  
  
 <400> 6816  
  
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 tctccggcga ccaagccgaa cgtatgattt tcagcagcag ttgatgaaca aaagctcgat 120  
 gatgagttgg gcagtctaga tccagctgag ggaagcttgg gtcgccgggt cgacgggacg 180  
 accaccgcca gcagcaggcg gcaaacctgc tgcatttat gctgtctctg aaccgcaggg 240  
 atgggttctc atccttttga tctccgaaga tggagactaa gagttaaatt ttgcgtgtga 300  
 attatcgctg gttttttgtt cttgtgtcgc gtaagggtga ccatagcctg tcgatatg 358

<210> 6817  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-G2  
  
 <400> 6817  
  
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 agagacagag gagccagggg agggggggtta aatcaagaat aaattataac cgcacggcca 120  
 agaacaaggg agggtaaata aatcgcccat cgcctcaccg cccgggaggg gatgatgtcc 180  
 gaaagcgagg agcacgggtc gtccttgga aagattggcg acaagatcgg cgacaagatc 240  
 catgagttca agaaggattc atcgtcctcg gactcggacg acgacaagaa gaagccgcat 300  
 aaatccaaga agaagcacct gtttggcagg aagcatccgc tccacaacgt ccttggcggg 360  
 ggcaaagctg ctgatcttgt gatg 384

<210> 6818  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-G4  
  
 <400> 6818

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cgagacatag tctttcagaa gcgctagcgc cttacgaatg ggtagaccgt accaacctac 120  
atccccata tctgctagtc taccactgta agagttcgca cgacttagtc aactatgcta 180  
gagcccatag tagcttgtgg ctgcacacgg aagtttatag catgaataat ctcatgatcc 240  
ccttgagcct ggggtggcgg ccaaagaaa acagacaatc gctggaatag ctaggtgcct 300  
caatccaccc agatgtgtgt ttaggttgcc accttaaata aaccattaat taacaatctc 360  
acaactgtca tggatacact cacccaatcc acgtctacta gcataacatg gcataata 418

<210> 6819  
<211> 340  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-G5

<400> 6819

acgggttacc ctagaatgcc acctccaagt acctttacag gaacatgatc acccagcaaa 60  
tttcataggt aagtatcaac aaaattgtaa ctgcacatgt actgccaaact gaatcaatac 120  
agacattacc aggtacgac gataacgatg gtcgccgtag cctctgtgag ccatggacgg 180  
caactcgagt cagctcatta tctacgactg tggtaacttct gcgcttggcg tcaacttctg 240  
ggaagcggat ccgagaccgt ggaatactat gcccggaag aggtccgtg tacgactact 300  
actgtggacc ggctccattg catcatacaa ggtcgtcgat 340

<210> 6820  
<211> 418  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-G8

<400> 6820

ccgggcccgc gggcaacatg atatgtatct tgcttggagc gtcattttat tttgttagta 60  
tttgcttgat tttatttata atagtgtttt gtatctttag tttcaattaa aatgtcaagg 120  
atagccttta ccatgcttat tttgctagta tacatgttgc tgtttgaaaa cagaaagtgt 180  
accgttggtg caaaaattcc ctagaaaagt cagagaatgg tataatgttg aatctttttc 240

atattgagct ctgataaatc ttctacagca tagtattttt cttataattt ttcgagttag 300  
ggaagtatga tgaatcttgc attctttaca gactatactg ttttggcaga ttgctgttat 360  
gtttgcattg tttgcatatg tttgcttggt taatgattct atttgaggat aggagtat 418

<210> 6821  
<211> 201  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-H10

<400> 6821

ggtcgacggc gaagacgaaa gcacaaagga agtcgccggg ttctgggggt acctgctgca 60  
gattatctat cagacaaatg caagagctgt gaagcctaca gactgcatca tctgggtcaa 120  
caatttccca ttctcaccg taaaagaata cagtatggat tttctactga taagaatgga 180  
ctcgggtcaaa gctgttttcc t 201

<210> 6822  
<211> 413  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-H12

<400> 6822

ggtcgacggc catgcgatac ttccaccttg ggtacacaca tgcgtacaca cctacatcga 60  
gagaaaatta tggacttgat tgcgggtacc acgccctaata taattgagca ttaaaccaaa 120  
cacgtctaaa acctctcttg tgggtggaat gcatgagaat gaagcgcacc ctgtaaacta 180  
tgacggaggg aggagtagta tgaacgtgca aaaccaagta cgcgtatggc tagtcggtca 240  
acgcacttcc tcttggcata tcaactgacat gtgggaccgg agtgtgagca aaccggtcac 300  
agttgacggc taaatggcca acccgccgtt ccttgagaga gatgaggagc aagaacacac 360  
agacgggctc gcacggaggg caagatatat tcgagcatgg ttgattgata tca 413

<210> 6823  
<211> 229  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-H2

<400> 6823

gagttgagtt gaatgggtac cttccggcgt tgagagtttt gtttcttacg ctggtacctt 60  
 gaacatcaag cgttgctgaa tatgtgcctg cggttgctgt tgtatgtaat gaccacacat 120  
 tacaagtata tgagatcgtg caaagatggt gctgtttggg accttcaaag ttaatcggtt 180  
 gtcgcaatga ttcacgctta cgttccccta attgtgacat catagatct 229

<210> 6824

<211> 327

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-H3

<400> 6824

cttcctcaca acaatcagaa tcatgatata acacgatggt atctcgctat gcctttctga 60  
 taccgcagaa cataaatgca gatcaccttt aaaaatgaag gactgactag acattggtat 120  
 tcatggtgaa ggagatccag acaagtcata ctcatgttaa actaacagca gtgaatgcac 180  
 atgacagtgg tgctctccaa ttggtgcttt ttaataagag gatgatgaat caacatgaaa 240  
 ctaactagat gggcccttcg cagaggggaag catgaatttg tacagggtgcc atagctcggg 300  
 tttgaaataa ggggtaataa tattttg 327

<210> 6825

<211> 252

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-009-Q1-E1-H4

<400> 6825

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 aacaggtgca agatgggctg aacaattttg aagaggccat ggagaagatc actggccttg 120  
 agaagacgtt cgaaacaaag ctcgataaca gatttaatga actgcttgcg cgtcttccaa 180  
 cggctgcacc tgccgcacct ctgcaacaac aactactaat aactccatgg tcgcaaacaa 240  
 acctccgctg aa 252

<210> 6826  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-009-Q1-E1-H6  
  
 <400> 6826

cccgggtcga cggggatcca aagaggatgg ctgggaactg tgctgaactg aagatggctg 60  
 aagatcgtca gggtttgctt gagtttgctc catataaata aataaaaatg gcggtataaa 120  
 tcatttagaa cgtctctatt ttgtgcgagc aaaattagtg aacttacggg acttgtcatg 180  
 gaattgcttt gccttttggg aggcgactga atatcagtat ttgagataag gtaaaatggt 240  
 gctgacatga tatgtatata tcgagattct agcttaatct atagtataaa taaatgatta 300  
 gtgccatgtc aaaaaaaaaa aaaaaaaaaa aaaggtaaaa aaaaaattga aaaataaaat 360  
 ttcaatagt 369

<210> 6827  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-A10  
  
 <400> 6827

agtcccgggt cgacgaatac gcagatatga tgctactgtc aaaaacgtct actgggctga 60  
 tagtggtgac ctagttagca tcgcaagtga tacatcattc tacatcctga agtacaatag 120  
 agatgttggt gctgcctact tggaagggtg aaagcctgct gatgaggaag gcgctgaaga 180  
 tgcttttgag ttgcttcatg aggtcaatga gcgagtgcga actgggattt gggttggaga 240  
 ctgttttatt tacaacaact catcatggcg cctaaattat tgcgttggtg gtgaggtcac 300  
 cacaatgtat cacttggatc gccctatgta tttgatggga tatcttgcca atcaaagtcg 360  
 agtttgtctt attgacaagg agtttaatgt cattgggtat acatta 406

<210> 6828  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-A11

<400> 6828

gacgggatga gcaacacgaa gtactgcttc gccatgagaa caacgagaag cgcccccatc 60  
aacgccagaa acacgacgta gacgatctcc aggatgtaga cgaaggcgag cgtgagcagg 120  
ggggccttca gctgcgcctt agctttcccg aggagctcgc tgaaggtagc gcgctgctcg 180  
ccggagtacg tcaagacggt ggccaagagg aggaggatcc ggacggcgga gctgacgacg 240  
accgcaaca gcaggtaacc cgcgcttacg agcaggagct ccttggtgtc atcctggatc 300  
tcctgtacga gcttggcgta ctccaggctg ccggggctcg tgccgtttag cgccttgacg 360  
tcgagctgga tctcgtcggc gaggggctgg acg 393

<210> 6829

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-A2

<400> 6829

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aacgattatc gacccttggc accgagaaag caacgacatc atatttacct ttttattttt 120  
gtgtgtatct ttgccactct cattttgtgt ctgatatttc atgactttta atgactcaat 180  
tttcaaaatg acatgacttt tcatgacttg tgttttgggc tagattatta caaatctcaa 240  
cttctaagaa ctataaagta aaagaatgaa tacaaagacc cgtcgcaaca cggagaagca 300  
tgtattcata aaccccgacc cctctcggcg catgtcaaca tcgtagaccg tccgggcctc 360  
cgtaagggcg cacggccgga aaaccccatc t 391

<210> 6830

<211> 345

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-A4

<400> 6830

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gataatgtcg actgcggcgt tggctctcgga tgtgtacaga ataattcctc gctatcaggt 120  
 ggtaataacg caccggaacg gacgctgttc ttgatgcgcg gaatggcaag gcaaagcatt 180  
 ctttcaccga gcaatggtga ttgacgactt gattacagac aagatagatt tggcacattc 240  
 ttacctgtaa agataatttg ccaaataaag ccgtttataa gctttgccac tttgataatc 300  
 tcttgtactg acacaatttg aaagaattcc tttgagatct aaaag 345

<210> 6831  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-010-Q1-E1-A5

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 agcgtcgtcg agcgcgccatc ggagaccgtc atggacgaca ccgatggcca cgcgaccgct 180  
 cgcaatccgc agtcaatct ccacgcctga actactagta cattccaaca ccatgaagct 240  
 cgatcacgtg cgctcttcc tgcaccgctg ctactctcta gtcactcatc aaccaattt 300  
 gtcacgtctt cacacttate tataagtacg gtatgcata aactttgcac agacgcatac 360  
 tatttcgggg ttaa 374

<210> 6832  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-A6

<400> 6832  
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 cagaaattcc gcagaaagaa tctctgatag tttggtggga agagtgattt ctactgaatc 120  
 acttcaaagt tactttttct atacataggc tgtacatata tgatgtaact gaaaaacctc 180  
 aggggagcca attccatgtg gtcctgaca gtgacacgaa cctggtctgt cacagtagcc 240  
 cattgttgcc agcttcataa gattgacaat tatagatcaa tcaacaataa tgcataagg 300

catgatgtat tgttgccagc ttcataagat tgacaattat agatcaatca acaataatgc 360  
atcaaggcat gatgtaacga gctaataaat cgagaattc 399

<210> 6833  
<211> 370  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-A7

<400> 6833

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ctaaaggcgg ccgaagactt aagagccgaa caggctactc atggcaagag caaagataaa 180  
atagccaaga tggctgctga gctgaaagat gtcgccggcc gatatgagct tcttgaaaag 240  
gaaagccaag tgagagcggc tgacctgaag agagccatgg aggcagacaa ggaaacccgt 300  
tctaaaatca gagcgggagg aggagctccg tcaagccaga tatatcacgg ctgggaagcc 360  
ctttttgttg 370

<210> 6834  
<211> 392  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-B1

<400> 6834

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aataaccaac ttcatagtag aagatttgaa ggccatcaag aagccgaaga taatcgtgga 120  
tcatgtcatc accagctgaa atgtggcatt ctattggagc acttttctta ctcatcatcc 180  
atctttcccc tctgtttgtc gagattaccg attttatttg cgccattcgt acttcaataa 240  
aaacaggatg ctgccgcatt cctgtacacc gcaagactcc tattgttttt gcttttgaaa 300  
ttcgcgctgt atttcgttat gggcttgtaa gttggtatcg gaggagtga ttttaacttg 360  
aaactgcaaa tgttgggtcaa agatgtttta at 392

<210> 6835  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-B11  
  
 <400> 6835  
  
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 gaaggaacag cagcaagaag ctccagcgcc agctttcctt gcactattaa ttttagttgc 120  
 ctaattcgtc catcatccat ccatcatttt gctgctgaag tgtattaatt cttggttctg 180  
 cttactagat tccaccttat gcgctagctg ttggcgcaag tacctcaacc acctcaaaat 240  
 ttagtagatt tgtaatatcg ttttcattag ccattagtct ctatgttgaa agagtctctg 300  
 ttgaagaaat agctagctag gcctacaact tttcctatgt ctttttttgg aagtatttga 360  
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 aa 422

<210> 6836  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-B2  
  
 <400> 6836  
  
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 gtgagtttgg ccctatatgc atcagctccg aatgaggtct ttggtcaaat gttgggtttg 120  
 cccggctccc acgttttggg accttacgtt ctgttatatc ggctaaggta gcactgggag 180  
 aactactgcg attgtgccct gggtcatccg gatgagcacc tcagtagaga aagccgaaaa 240  
 ctgactatcg tgatatagcg agagactggg taaccactcg atgactcatc agaatttttg 300  
 ggattcctcc gcattaatga agggccgttt cccgatcatg aacgtatgtg ccccatattc 360  
 ggacgagcgc agaagtacca agggctatat agtagcccc 399

<210> 6837  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-B3

<400> 6837

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atgccacgc tgtctgatga ggataaagat gttatgaaaa aatgggggtgc tccaaacaag 120  
attgacttcc tctctctttc ttatacaagg cacgcagaag atgtgcggca agcacgggag 180  
ttcctctcta agttaggtga tcttagccaa actctgattt ttgccaaaat tgagaatgtg 240  
gagggcctga accattttga tgagatcctg gaggaagcgg atggtatcat tctctcaaga 300  
gggaaccttg gaattgatct tccacctgaa aagggtgtct tatttcagaa gtctgtcttg 360  
cacaagtga acat 374

<210> 6838

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-B5

<400> 6838

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cgagaagaag tccaaaggca agaaggacgc ctctggatac acaggtgcgg agaagaaacg 180  
aaaagcaaaa gtagattcgc ccaagaaggc tggggccaag aagaaaccag agatgctaaa 240  
gaaggaagag cctaagaaga atgacaagcc caagtcgtca gcgccggcca caactgatgc 300  
ttacgtcgca ccgaaggaag agacgaagaa gccagaagct gccacgcccg atacctacac 360  
cgcaccaaag gtggaaccaa agaaggaaga accaa 395

<210> 6839

<211> 390

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-010-Q1-E1-B8

<400> 6839

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 ccatgcggga ataagtatgg acaactcaagg tcgtacgatt ctccgaaagc tcttttgacg 180  
 gcagtgggtg agcggcgcg cccagttgg acgggaacta gctgctcttg tattaggggg 240  
 tgggtctgct ccaggttgcg tacataatgt gcaggtgtgc caagggcgat gggcccaaga 300  
 ccctgagcg cttaggatgt agatcaacat gctggcctct ctgttgagcc taggtangac 360  
 tacggcgtgt tgatcagccg aggtcgggca 390

<210> 6840  
 <211> 376  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-010-Q1-E1-C1  
 <400> 6840

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 aataactctg gctccttcaa tgtgaagaga aggtgggatg atgatgttgt attcaagaac 120  
 caagctcgtg gagagactaa gacaccgaaa cggttcatca acgacaccat cagaagtgat 180  
 ttccaccgca agtttctgca taggtacatg aatgatgct gctgtatgct ttacagtata 240  
 catgctggaa gaggagcctg tgatgtttct gaattctgaa gatcaatttg tatgacataa 300  
 ctgtaacatc tatgttacct gtacgggtgat atatttacc tgttcctaag agtaaagaan 360  
 agaaccact gtttgc 376

<210> 6841  
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 <212> DNA  
 <213> *Triticum aestivum*  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-010-Q1-E1-C10  
 <400> 6841

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 tgacccgat gcagtacact tttgtgtatg agcgtcgga ataggcccat cttgccgtcc 120

cggcacagag caggctcgag cttgcttaga ggagcaaatt accaacttct tctaccagcc 180  
 tgtcagaagt ggtcgtcgct tagttcctat ggcagctagt catgagacga acaggaagat 240  
 acaacacgta ggaaatgagc aaacttttgc tgggatgttc gtggcccat gtttggcagt 300  
 cggtagctca gttcagactt cgctcgcccc gaaatcatgc accgacagga actagttatg 360  
 cggatagtat tgctgaacat gaagctgacg gcacctgcan agaatacaaa tctattttaa 420  
 aacac 425

<210> 6842  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-C11

<400> 6842  
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 ctatgacgga tccaatgcat tgcagtgtgc catatgtgga agactcgtgg agcttacgtt 120  
 cacgatacaa agacatctag gcatttaca atttgggaaa gattacatca tggtcgacac 180  
 atcagatcaa aagtcacaga cccatatgtc tcagagcaca tctgctacat atgggtgggtcc 240  
 agatggggca tgtagatgt cttcaaacat taggaggaat ggtggagatg gagttacaat 300  
 agtcggtagt aacagttcag acatcgcacg tggcaaagtc actcacagga tcgcacgtgg 360  
 tattgggata ataggtcatg cactgactat aacagtgaac tgcgatggta aagttctcat 420  
 catgcaaac 429

<210> 6843  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-C2

<400> 6843  
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 aaacatatca ttgatgcctt gatgcaatct tatgatgaaa aacttaattt ggaagtttct 120  
 atacctagaa aacttaatga tgagtgggaa cctactataa agattagaat taaagatcat 180

gagtgttttg ctttgtgtga tttgggtgct agtgtttcca cgattccgaa aactttatgt 240  
gatatcttag gtttccatga ttttgatgat tgctctttta atttgcacct tgcggatttt 300  
ccaccattaa aaagccaatt ggaaggatca atgatgttct cattgttgca aatagaaatt 360  
tggtgcccgt agattttatc gttcttgata tagattttta tccttcctgc cccaataa 418

<210> 6844  
<211> 351  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-C3  
<400> 6844

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atgccagctc tcctgcgcca ggacttcctg ccaccgtctg gatccaggta atcagattgg 120  
cacaattcat gtgcgccatg aattagtaat gcgcaaccac tgcactcacg tctgatgagc 180  
cgacaacgac gatgtggtgg taaattcttt ttgcagaccg cgaggccgct gaggcctgct 240  
ccgggcagtg ctatgacggc tgcaagacca agactctgcc gaggcctctc cgcgcggggg 300  
ccggcatgcc caccacgtta ggcccgggtgc tcgccgacct tccttcaccc g 351

<210> 6845  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-C9  
<400> 6845

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tttacaggat tttcattaat gcaggcgtag ggaacctaac cgtcccctgg gtacaactcc 120  
ttggtgatag gtaagtttag agaccaggg ggaaacgccc ggtattctgg gcctttatat 180  
agagatccta gtctcgtctt ctcccttgcc gctcgtctct tcctcaaccc cggccacccc 240  
aagttccaac cctcgggtca caattgccac cagccttagt catgtccgga tccagccgtc 300  
agggccggtg ggtggcttct tctgtcatgg atgaggatat tgcgaagctc cgcatagcga 360  
ggtatctcac cccaaaaatc tttcatcagc ttccggcaca agggaaagtc ata 413

<210> 6846  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-D1

<400> 6846

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tcccttcaca tcggaggaat tagagtttac tgccaagcgt gaagctgcta aagtgatcgc  120
tgcataggag ggagtgcaaa tcaactgaaga agcccatccg aacttttatt acttacataa  180
gtcctgcacc gggcatttat aacaatcacc tgctcttccc tatagggtgca ttccttgtgg  240
gatccttgtg tttccttgtc atttgtgcta cgcgggaatg acattgtctt cttctggtgg  300
cagtagtacc tcctggtaag caccagggct ggcgggtaaa atatcctgta actgtctttt  360
gagagattag ttcattgttt tcgttaatat aaactttttc cc                        402
  
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<210> 6847  
 <211> 268  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-D5

<400> 6847

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gcatgacagt tatctctggg aatagagaat tgtactactt agtactttac cgatgcagcg  120
ttcgtttctt ttttgtgggt agatctgatg tctcgacgta ctgagacata gcgagtgtct  180
ggcgggtggg cattccattc ttttgggttc gtagttgcca tgtacatgtt ggttgatcga  240
ttccttaggt ttttgcgtcc tgcggtaa                        268
  
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<210> 6848  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-D9

<400> 6848



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agatccacca caaggtctcc gagaactgga tctccgccac gtcctcatc acccccgtcg 180  
tcggcaccta ccagtatgcg atgtggtaca aggagcagga gaagctgtcc cacagatact 240  
aaaggtggag ctttctcaa tattgcagca gtgggaattt ccatgttcta taatccacca 300  
aaagtgattt aacattttca gaatcacttc tagttgtacc cttttgctct ttccgttgca 360  
tatgcaatgc agcaagtgtg acttgcaaac ctattttgag gcctcaaag ttgagttgt 419

<210> 6849  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-E1  
  
<400> 6849

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tgtaatgata atttgcataa aaattattca cgcatacttc tattttaaaa atattcatgt 120  
aattaaaaaa tagttcactt ttttttaatg aaaaatgac gtgcaattca aaataatatt 180  
cacatatattt aaaaaaatct tcttgtaatt tacaaagttg atcgtgtatt tttttcaa 240  
tttcatgtca ttttaaaatg tttacttata attccaaaat gttgacgtat tttcaaaagt 300  
gctaatacatt ttttacaaaa ttatactatg ttttgaacaa ttttcacaca tcattttaag 360  
gtttatgtaa ctgaggaaac atgaaaattg gttatttaat ttaatacaac aat 413

<210> 6850  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-010-Q1-E1-E10  
  
<400> 6850

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tcatgtgagt cgtggccctt gcactctgact caagatctgc gtcatgaggc gacagacagt 120  
ctgaggcaca tacatcactt cggtcacact gaattgagtt cttgggactc gagctgtctt 180

caacagcttc atcagcactt acatgtattg ctcggtctgc tcacgttcaa tgtatacgca 240  
gcatgcaact tctggggctg actgagaggc anatccctca cgtacatcag tttcaggtca 300  
catagttttt gagtaccatc agatatccat tcgatcacc atgctatcac atcttcagag 360  
tttccggtga tctgc 375

<210> 6851  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-010-Q1-E1-E11  
<400> 6851

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caatggcgca agtggcttcc aacagctaaa ttttggtatg acaccactca tcaactctcc 120  
ttgaatactt ctccattcaa agctctctat ggtcaagaac caaacctcgg tggcctgccc 180  
accttatctc tgaacctgcc agacaacaag gatgcagact tggactgggc aacacacaat 240  
gacaggctac gtgctcaact tgcccaggca caaaacagat gcaaacagaa ggctgatcgg 300  
aacaggacag agcattcttt caatgtcggg gatcaagttt tgctcanatt acagccctat 360  
gctcagtcca tcgtggccaa tcgcccctgc caaaa 395

<210> 6852  
<211> 399  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-010-Q1-E1-E12  
<400> 6852

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cgatgagctc ttaactatat ccacagtga gcggaatta gtgaaccgg gggatggcaa 120  
acatgcagat ggggaagttc gcaagagaca aaagattgaa acaaggatta cttgtgccaa 180  
gatttctgct ttgactaatc tggctagcaa acacaaggat acattgcct caagctcgcc 240  
aagttgcgag gccaatggtg ttttggggga gcatgctaca cattctgatg agcatcaaca 300

ttccacagac actgcagaaa cctcacggca agttggcggg gattgtatca aagcaatggg 360  
cagtttgtct agtgagaagg ctgtaaatac caccaaaac 399

<210> 6853  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-E7  
  
<400> 6853

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acctccgagg acgagggtgca gcgcatgatg gcggagatcg acaccgatgg tgacggcttc 120  
atcgacttca gcgagttcat ctcttctgt aacgccaacc cggggctcat gaaggacgtc 180  
gccaaaggtct tctgaatcag ttcatttcac ctacgcccgtc cgatccagga gccgatccat 240  
ctacgtacgg ctctgtatat caatttcatt caactaccta ctccgggtccc gatccagcct 300  
cagcttcacc tgaggccggc cctaattttg tttgatcaat ttttttgcta ctagtagtaa 360  
ctagtgatga tcaactgttg accatttatt t 391

<210> 6854  
<211> 393  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-010-Q1-E1-F1  
  
<400> 6854

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tgctgatatt actgttgctg cgttgcccac ggatgaggaa cgtgcaactg catttggcct 120  
tatgaaaatc gatgaagaag ggaggataat tgaattcgca gagaaaccaa aaggagaaca 180  
gttgaaagct atgatggttg atacgaccat acttggcctt gatgatgcga gggcaaagga 240  
aatgccttat attgctagca tgggtatcta tgttattagc aaacatgtga tgcttcagct 300  
tctccgtgag caatttcctg gagctaata ctttggaagt gaggttattc ctggtgcaac 360  
tagcactggc atgagggtac aagcatacct ata 393

<210> 6855

<211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-F10  
  
 <400> 6855

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aacatcatgg atgttcctta ctctgcattc cttaatcttc attctacatg tataatagca 120
gacacaacaa tatagttagg acatatatat agtgcaggca atatgaacga gatggggtag 180
aaattaataa atcacttaca gaacgtagca actgatgata gatttatcga gctcgcgcag 240
attgaaaagc tggaacaatt cactcagttc aatttgtaca tagtaatgtt tgaagtgatg 300
ctcatgtcca acttccgcat aaatatattc tttggcgttt ttatttttta tgtaaccctt 360
gtaccatttc agcagacctt tcatttgtgg aggtagattc ttttc 405
  
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<210> 6856  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-F9  
  
 <400> 6856

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tgaacccgac gcactaccgg gagccaaggt ttacaccaa ggtgtttaag gaatgccact 180
cctatgacca agatgggaat tcctttgagc tttctctggt aacttccaag tgcattggag 240
cttatgtgaa gagcaagaag aaccagaacc agatatgttg gctatgggag aaggtcaagt 300
gcacagaaga caaaggcttt cagagattcc tggacaatgt gcagtacaaa tccactggaa 360
tcctgcgtta tgagcgcgtg tttggggagg gttatgttag caccggt 407
  
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<210> 6857  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-G1

<400> 6857  
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 gagtatagtt ttgagcatta ttctgatgct ctctagtcca aacgatgagt ctccagcaaa 180  
 tattgaagcg gctaaggact ggagagaaaa gagggccgag ttcaagaaaa aggtgaggag 240  
 ccttgttcgc aaatctcagg aaatgctctg aaaaaggagg atcatatggg ggagtccaca 300  
 agcactgcaa ttctcttgct ttcaccaa atggggcacctg atgccagcac ttgcacttct 360  
 ccctgttta ttttccgttc agcgtcgggc gaatggtggg gttg 404

<210> 6858  
 <211> 322  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G12

<400> 6858  
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 ctttccttag gacgaatggt gcacatggag acatgaaatt tcgtgtatat gagattcaaa 180  
 tttctgttgc ggacaggcat gggcagcttt cctgaaacga ttattacagt gcctgaagag 240  
 tcagttatga gatcaactta tggattgcat acaacagatg acattattta catgtattct 300  
 tgcttttatg actagcaacg gg 322

<210> 6859  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G2

<400> 6859  
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 aggtcgagtc tgtggcggtg gcgaccggcc tttggtgcgc caggtcaggt ccgcgagctg 120  
 ggtcacggtc gtggcgacga catcgacatg agctactccg gcgatggcga ggccgtggct 180

tagggggcgt gtgttggaat aagccacggc gtttattgtt gtcggaccgg acggggcgcg 240  
 cggatgcgcg cgggacgtgt gggtcgcact ggtgtagtcg ggctcgtcgg gctcgtcgga 300  
 tgcgcgcggg atgtgcggga tggaccgccc tggcgagtgt gcatgctggt gaaaatgggc 360  
 accggttcgt ggccgtgccc ag 382

<210> 6860  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G4  
 <400> 6860

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 gttaattggg aatcaactgg ccagaaatta aaattcaggg gggcgacgga cctctagcta 120  
 aggtgaaata gtatatcagg agaaaccttg tgcacgcgga gttactacga acatctagta 180  
 tcaagaagaa gcgggtcaagt agtgtcatct gtgggatgaa taccatgcaa gcagagacgt 240  
 aagatttgca cgaataaggg aagaggagta ccttcttcgg ttgtcgggtg ggtcacctcc 300  
 acatgtcgcg ccgatcttct tctttttatc ggggaaaccg atgttctgga tgggtgcaagc 360  
 ttggacgaac ccat 374

<210> 6861  
 <211> 299  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-010-Q1-E1-G6  
 <400> 6861

tcccgggcgg acgggaatct aaaactgatc actttgttgt gtacatatgg atgcacattc 60  
 gaatgtgcag cctattaaat gatgacatag cctcagtgat gctgcggaca tctttgcaaa 120  
 cgtcacataa tattaccaga aaatccatga tcagcccaat ggagtactac aatctcttat 180  
 aaaccgcaaa cattctgctt tgctcgtcaa tcagattaaa ataagttccc aatgaccgtg 240  
 ggatgttctg aatgtggggg agaggtatat ccaactgctat catctatcta gccaacact 299

<210> 6862

<211> 419  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-H10  
  
 <400> 6862

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aaaactggtg gcgatatgac atcataggag ctcaggaaaa aaaaatagag tattgagaaa  180
ggttcatttt tttgatttgg agcactaatt ttgttttttc tgtcccgagc tcctcccatg  240
tcacattgcc atgaaacttt gcacgcacac agaaaacttg ttcattgtttg atgtatagaa  300
tttttagatt ttttgctggt ttattttatt tttagatatg atcgtgtcta gctatggatt  360
ttcactacaa aaccctagtg gataagattt ccctattgta tactctaggg gcaatgccc   419
  
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<210> 6863  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-H2  
  
 <400> 6863

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gaccacagag cggcggcggc ggcggcggca gcggaagaaa gaggagagag ctccagccat   60
ggtgcacgtc aacttctacc gcaactatgg taagacattc aagaaaccaa ggcgtcctta  120
tgagaaggag cgtcttgatg cagaactaaa gctggtcggt gaatatggac tgaggtgcaa  180
gcgtgagctc tggaggggtc agtatgcact gagcaggatt cgtaatgctg caagacactt  240
gctcacactg gatgagaaaa atccccgccg tatctttgag ggcgcggccc ttctccgtcg  300
catgaaccgc tatggtctcc ttgctgaggg ccaggataag cttgattacg tccttgccct  360
gactgctga                                     369
  
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<210> 6864  
 <211> 367  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-010-Q1-E1-H3

<400> 6864

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa attaaaaaaaa aaaattaaaa 120

aattaaaaaaaa aaaaataaaa aaaaaaaaaa aaacggggccg ctcaaaaggt tcaaagctaa 180

cttaaccttg aatgcaactt aaaatctctt caaaagtgtc accaaattta atttaagggg 240

ccttcttttta aaaacttcat aacgggaaaa accctggggt taccaaattt aaccctttta 300

aaaaaaatcc ccttttccca atttggttta aaaccaaaaa ggcctaaca atttgccttt 360

ccaaaaa 367

<210> 6865

<211> 341

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-H6

<400> 6865

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cctattacaa ggaccgtctt gatgcagaac taaagctggg cagtgaatat ggactgaggt 180

gcacgcgtga gctctgcaag gttcagtatg cagtgagcat gactcgtagt gctgcatgac 240

acttgctcat actggatcag aaaaatcccc gccgtatctt tgagggcgcg ggccttctcc 300

gttcgcatga accgctatgg tccccttgct gagggccagg a 341

<210> 6866

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-010-Q1-E1-H8

<400> 6866

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gacacagtct ttcagaagcg ctacacactt tcgatggata gaccggtaca cctactttcc 120

cctacatctg ctagtctacc ctgtaagagt tcgcacgact taatcaacta taccagagcc 180



cataatgggtt tgtggctgca cacggaagtt tctagtttga aaaatctcat gatccctttg 240  
 agcctgggtg gcggtccaaa agaaaacagg caagtcctgg attaccagg tgcctagaca 300  
 ggcaatccta gaataaccag gtgcctcaaa tccaccaga tgtgtgttta agttgccacc 360  
 .ttaagtaaac ca 372

<210> 6867  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-A3  
 <400> 6867

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 gtgagaatag catgaagttc aactactacg ttgaatgaat ttcagatgaa aaacttttaa 120  
 aatctttgcg agtatgaaaa agatgatcaa cacgggaaag ttgcgtgttt acagcagctt 180  
 tcgatcggat agatcacttg ctcaattccg gtgagtggat gtacagctag gatcagtga 240  
 tagagatata cgagaaagca atcgcagtgt atcaacacag tgaagttcat ggtttcatac 300  
 cgaggagttc aggtacttca cgcgatgcat ttttggcgaa tcagttttgc gataaacgca 360  
 taacgaatga tctcgccatt tttaaaaata cgt 393

<210> 6868  
 <211> 395  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-A5  
 <400> 6868

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 acgagtttgc tcgctgtaaa tttcaacagt agcaatttga accttgatcat gaatgtcact 120  
 atgtcagcgt tgagtttcat cactgggacg gtagcaacta ctgacatttg ggaatcgtag 180  
 acttggaact agtgcaaatg ataaattaga tggccccgca gactttctga atgtcgagca 240  
 cgtggaatat tataaggtgg aatgcctaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aacaaaagaa aaaaaaaaaa aaaaaaacca gacaaccaaa gaatcaaaaa 360

aaacagcaca aaaaaaaagc ggcccccccta aaggt

395

<210> 6869

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-A7

<400> 6869

aatgcccggg tcgacgggaa gtgggggacg cctgctccag tggaaaatgg ggtggccaac 60

ggaagggcgc cagcatcatc cgctacaagc aatctagcca caggtcaaaa ccaaagatag 120

atgcatgttg agttaattgt aaaatcttgt catccgcatg ttggtgtcag caaggttatt 180

gttgcgtttc ttgggaatgt aagattagct gtgtgtttat gttgtagttg tgagatgatt 240

acccttgctc ctatgagtga tgatcttggt atagggataa agttcataag aaggttcgcc 300

ttaggttttg ggcagtttaa acggaatagc cggaccctgt aggtatcttg atgcataatg 360

atgtaaatca gttcatggtt ttgt 384

<210> 6870

<211> 337

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-A8

<400> 6870

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ggaagggcgc cagcatcatc cgctacaagc aatctagcca caggtcaaaa tcaaagatag 120

atgcatgttg agttaattgt aaaatcttgt catccgcatg ttggtgtcag caaagttatt 180

gttgcgtttc ttgggaatgt cagattagct gtgtgtttat gttgtagttg tgagatgatt 240

acccttgctc ctatgagtga tgatcttggt atacggataa agttcagaag aacggtcgcc 300

ctacgttttg ggcagtttaa accggataac cggaccc 337

<210> 6871

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-A9

<400> 6871

cggggccgac atgggcgaca tgctgatgat ggacaggttc cgccagtggc aggccacgca 60  
caaccggaag tacctgagca cggaggagag gctgcgctgc ttccaggtgt accgcgacaa 120  
cgtggagtac atcgaggcca ccaaccggcg cggcgacctc acctacgagc tcggcgagaa 180  
tgagtctgcc gacctacccc aggaggagtt cctggctagg tacgcgctgt cctacgacgc 240  
tgccggtgat gatacaggca ttacgttgcc tgtgggcggc ggcgacgccg agctgtggtc 300  
gtccggcggc gacgatggta gctccttgga ggctccgcct ccagctggg actggagatc 360  
caagggcgcc gtcacaccgg tcaagtccc 389

<210> 6872

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-B1

<400> 6872

cggggccgacc ggcagtgatg ggatgagtat ggagaggagt agtatatata gtgacggtct 60  
tctgaaagga ggtgataaag ccaagcttga ggaagcggtc aatcagttga tggcgatggc 120  
gatggtgacg tcgcttgctg gtaagatact tgatgctccg gctggagccg acaggggtgcg 180  
tgagactggt gatcaaggag tcttgtgtgt tgctgatgcc tgacgctgtg ctgtagtttt 240  
tctgctcctt tgaacgctgt ggtccattgg tctctatata gttctctcta ctgctttgaa 300  
ctctaagtgt gtggttgacg gtggtagcag gttttggccc cgtgggagtg cttcgatgcc 360  
gatcactcag agcgtgtttt ggccaacttg ctgcctctct tttccagttt gttg 414

<210> 6873

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-B3

<400> 6873

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tgacagcatt ctaacctgtg atgtacccaa ggatgtggtc ggcaacatgg gcctttggac 120  
ctttgatgac atgcccttgt ctgctgggtt ctactgaggg aatcgagggtc gctgggtgcc 180  
tgtatatata gacaaaggaa taagtattca ggacatcaac aagtgccttgt gtctgggtgcc 240  
tctagaattg agcagtagcg atgtcagtct atgggttatgt ctagcttaaa tggtcagggtg 300  
actgaggtct tttgcaatag acctctgtct tgtgccccca gactatatta tatctatata 360  
tgagaccagt atgtgatggg gaactgctta ttttgtattc atg 403

<210> 6874  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-011-Q1-E1-B4  
  
<400> 6874

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cagcaagggg gcttgagtat ctccatggag ctgagagatc catcatctat agggatttca 120  
agacatcaaa catcttgcta gacgcggatt ataatgctaa gctttcagac tttggcctag 180  
caagaactgg acctagtga gaccaaacc atgtctcaac tcgggtcatg ggaacttatg 240  
gctatgcagc tcctgaatat gtgatgactg gccatttgac agcacggagt gatgtttatg 300  
ggtttgggtg tgtacttctc gagatgatta ttgggaggag ggctgtggac aagagccggc 360  
cgagccgtga gcataaacta gttgagtggg cagcncct ccttgtccac aaccggaagc 420  
tcttcagaat ca 432

<210> 6875  
<211> 367  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-B5  
  
<400> 6875

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cgagcatcaa ctgtgggtgt gcataattat ggttatgtca gacgtgttaa ttgtcgcaat 120  
ttccaattgg tgggtactata tatatgtttg ccaaataatg tgtgcaccgt gtgcaactat 180

ggaacagcga agtggtaatc attttgtgag ctttgaaca gtgaagtgac acatatttgt 240  
cctaaaaaaa aaaaaaaatc aataaaaaaa aaaaacaaaa actagacggc ctagacattc 300  
aatcaaaaac gaaacagagc catgagaatt cataacacac actagcctgg aacaaaaata 360  
caaaacc 367

<210> 6876  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-011-Q1-E1-C1  
<400> 6876

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ttagctgcag gaaccaattc ctgagaaggc ttgcctgcct catggcccat aagtgggctg 120  
gaaccaatgc ttcgctgaag caatttcacg ggcccaggcg caaaattagc acccccggga 180  
agcccagcca tgttgagact tctggcccag ctgacctatg aaacgatttt taatgggttg 240  
cgtggatttt cttataaata gtaccatctt gtttatatat cttaaataca aaatcatcta 300  
agcgggacga aactaagaat atcaccttgc tttaatagta ggtatagata tagatataga 360  
tatgccattg gcctttgggt ttgccccgtc tcttgagaaa ttagaact 408

<210> 6877  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-011-Q1-E1-C4  
<400> 6877

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gctgcacagg gaggagccca ggtaagggtc tcccttttat ttatttctgt ttttgtaatt 120  
tctgacattt gttttgattt aataaaatat taaatcattt atttacctta tgccaatttt 180  
tgcaggagct agatatatta ttccagagct cttttataat tggcataata tttggacata 240  
tattaatata tataactaat atatttccaa tgcaaattt tatgcattaa ttccaaatgc 300  
ccagaataaa tacctatgag ctcttaaaaa tattgggttg atttttatct ctgtccaata 360

tttttagaga gcaacatgag cattttcttg gacccttttg gagaaatttc tatttgggtc 420  
att 423

<210> 6878  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-011-Q1-E1-C5  
  
<400> 6878

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tcgaggcgac cctcgaatcc agcaggaacg ggtccaacgt gcagggctac ttcgtgtggt 120  
cattcctgga catgttcgag tatatatctg gctatcgcat gggttttggc ctctatggtg 180  
tggacttcga ctctgaggag aggacgaggt accagaggca ctccgccaag tggttcaccg 240  
gcttcctccg tggcggcgac ctccaggccg tggtctctgc cggcaaggtc tattccaggt 300  
gatcttcaca cttcttcaca cttccgtagc ccacgaagag gaaaatgcac taataagcct 360  
ggatgggttag gtgttggttt tgggtggaaa ttgagctttg cttgggcagt anggtgtata 420  
ngcctctgct tc 432

<210> 6879  
<211> 415  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-011-Q1-E1-D1  
  
<400> 6879

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atgatttgag tctttgcttt ttagtttacc acaataatcc ttgctgtaca caccttttgg 120  
agagacacac atgaatcgga atttattaga atactctatg tgcttcactt atatcttttt 180  
gagctagata attttgctct agtgctttgc ttatatcttt ttagagcacg gtggtgggtt 240  
tattttatag aaattattga tctctcatgc ttcacttata ttattttgag agtcttataa 300  
aacagcatgg taattttctt tgggtataaa atttagtcct aatatgatag gcatccaaga 360

gggatataat aaaaactttc atataaagtg cattgaatag tatgagaagt ttgat 415

<210> 6880  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-D11  
 <400> 6880

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 cgtccaatac gttctatgat ccggcaaaga agcggcgtgt gctgtggggg tgggtcggcg 120  
 agaccgactc tgagcgcgcc gacgtcgcca agggatgggc ctcgctccag tcggccccctc 180  
 gcactgtggt gctggacacc aagacaggaa gcaacctcct tcagtggccg gtggaggagg 240  
 tggagacgct ccggaccaac tccactgacc ttggcggcgt caccattgac cgcggtccg 300  
 tctttccact cagccttcat cgcgccaccc agctagacgt cgaggccaca ttccgcctcg 360  
 atccgctaga catcgccgtc gccaacgatg c 391

<210> 6881  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-D2  
 <400> 6881

cgggtcgacg ggcacccgag gtgagcacgc ctgctcctcc ccctccccta cctctgccta 60  
 gctagggttc ttcaaatttt agttgcatca aattagttag ggttcatcta tgggtggaaa 120  
 tgaatcggat acggatgcg ctcagatggt ttcttagata ttgctcaa ataggatatgtg 180  
 cttgccaag tggccggtca tgtttgcagg ttacacctct gactggccta tgttttgccc 240  
 gagtgttgat tcatttccgt tccgacaaat ttcaggcgct cgatatgtcc tatttttagca 300  
 aaggatcatgc cggatttgtt cgtgaatttt ggcatgactt gtgccagaat ttgtaggaaa 360  
 tattgagtgc cccggatttg tgtgttgagt atcctggtag ttgtcttcga tcgattttc 419

<210> 6882  
 <211> 266  
 <212> DNA

<213>       Triticum aestivum  
 <223>       Clone ID: LIB104-011-Q1-E1-D3  
 <400>       6882

acactagcaa caactgatgg ttatacacca tgacgtctat gcgcacatat ttgaaacaga   60  
 gcttgtcata tatatagcac aaagccatta tgagtatata tagattattg tataaggtta   120  
 ctctatagat gaagaactaa ttcattcagct ctagctaagc tgggtacaga gctaattcat   180  
 cagctcacca gtgatcatgc gtgttgctga atatctcatc taagtgcgtg ttgtgtaatg   240  
 agattaatgt gggaatacat catggg   266

<210>       6883  
 <211>       433  
 <212>       DNA  
 <213>       Triticum aestivum  
 <223>       unsure at all n locations  
 <223>       Clone ID: LIB104-011-Q1-E1-D4  
 <400>       6883

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 ccgtacgacc acaagtgcga cgtgtacagc tttggcgctc tgctgtggga gacgtactgc   120  
 tgcgcttggt cctaccgaa ctacagcatc gcggacatct cgtaccatgt ggtgaagctg   180  
 ggcacccggc ccgacatccc gcgggtgctgc cccaagccgc tgcgggagat catgacgcgt   240  
 tgctgggatg gcaaccgga ccaccggccg gagatggccg agtggtggc gatgctggag   300  
 aggatcgacn acaccaaggg caagagcatg acgcccggcc gtcccgacca cacctcgcan   360  
 ggctgcagct gcttcggctt ctccaagtag tagtagtagt cgtcgtcgtg ttgtgatgct   420  
 ggtcggtctg ctg   433

<210>       6884  
 <211>       88  
 <212>       DNA  
 <213>       Triticum aestivum  
 <223>       Clone ID: LIB104-011-Q1-E1-D7  
 <400>       6884

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aggctcactt tcctaaagta ttgtactg

88

<210> 6885

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-E12

<400> 6885

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atatttgaag gatagaatct ggaaacatat acagggctgg atggaaaagt gtctatcggc 120

tggtggggagg gaagttttga ttaaatcagt cgcacagtct attccaactt attccatggc 180

atgttttaag ttgccccgtg gactatgtga gcacatcaat gggctactac ggaaattttg 240

gtggggtagc aaggagggtc agaggaagcc ggcgtgggta tcatggagaa ctatgtgcaa 300

acctaaacat atgggaggca tggggttccg agatattgaa ctttttaacc ttgctttact 360

ggcaaggcaa gtatggagat tgctccaaga gccggatacc ctatg 405

<210> 6886

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-011-Q1-E1-E2

<400> 6886

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cgtccgcgcc acagacttca agaagattac cgctggaaaa gatgacaagg gtcttaagac 120

ttacgatcct ggttatctca aactgcccc cgtgcgttct tccatctgct acatcgatgg 180

ggatgaggga attcttcgct acaggggtta tccaattgag gaggtggctg aaagcagttc 240

atgtgttgag gtcgcctacc tcttaatgta cgggaatttg ccaactcaga gtcaactggc 300

aggctgggaa tttgcaattt cacagcactc tgctgttctt caaggactct tggatatcat 360

acaatcaatg cctcacgatg cccaccccat ggggtgtcctt gccagtgcaa tgagcacact 420

ttctgtcttc caccagatg caaacctt 448

<210> 6887  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-E3  
  
 <400> 6887

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 tctgacgata aatgaaccct gtggagagac aacaagccaa aatcaaacag attaggggtcc 120  
 acaactgttt caatgggaat gcagcgctca ctattgaaat atcatacaca tcacaaaatt 180  
 agctattact gttatatcta gataactcat aatgaagaaa acctacacta aaggcaagca 240  
 tcaccacaaa gtataccttg tcatagactg gaatgaaata gtagccatta ggagcacatt 300  
 ggggtgcttcc ttccacaaa ccatcaacag tacacagctc aacctgattc aaaaag 356

<210> 6888  
 <211> 343  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-E4  
  
 <400> 6888

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 accgcacaca gctaaaagat caatgatcaa atgttgtgtg tctgggggtgc cccctgcccc 180  
 cgtatataga ggaatcgagg atggggcccg ccaacgaagg tggcactccc aacgggggga 240  
 atccacatct aaaccttgct atacactaga atgaaatagt acccattagg agcacattgg 300  
 gtgctttctt tcaacaatcc atcaacagta cacagctcaa cct 343

<210> 6889  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-011-Q1-E1-E9  
  
 <400> 6889

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 cgaaaaaccg agccaacaat gagtgcaccc atactaagac taccagagcg gtcttgccgc 120  
 gtggaggaga tatcgtgtac agtggtgcac accagcactc tggaggagtc ggtgcttctc 180  
 tgcattggcca ggatggacgc cttctatgtg aatcgcttcc aacttacggc acaggggaagg 240  
 aggcagggaa cgaggcaaac tacattgtcg gcatgtcgag ttgctaccct aagccaggat 300  
 ccatcaaggt cagcgacggc gaggtgctga ccatcgtctc caactacagc agcgaccgag 360  
 agcacaccgg cgtcatgggc ctgggtctaca tctcgtggg cgaaccgcaa c 411

<210> 6890  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F11  
 <400> 6890

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 ggtcagcaca tggaatatgc tagcaatgta acacatagag agtaatgaac agaaatatgc 120  
 tatactacat gcatatatga ctagtggaaa gctctatggt tacagttttg cataaagcca 180  
 atttttccct actgcaaagg aataaattta atttaactat catggtgggt gttaaactt 240  
 gagaaggtag acaccctctc aatcccaatt gagcatcatc attaaacca acagattaaa 300  
 ttaaagtaac atgatgagat tcacatgata atccagatac tagatactca aaacatccat 360  
 aaccggggac acggctaacc at 382

<210> 6891  
 <211> 269  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F12  
 <400> 6891

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 tttgtggcaa agccaccatg cattatTTTT taccgtgtc actcttgatt caatgcacca 120  
 tcccgttaca ccgctggagg cattcgtata gagtcatac ctgggtccaag tttcagattg 180

taatccctaa gttgtgatca caataagtgat gatgatcatc actattagag cattgcgcac 240  
 aaaaggcgca caaaaaagaa agggggccac 269

<210> 6892  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-F3  
 <400> 6892

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 atcgttattc gcattctcaga gatgaacaca gtgggtgtaa tacatcttat ttgtttggca 180  
 gtcgcaatcg ctcgttctat atctgaatgg ccgtgctatc ctatcttcga aggttcataa 240  
 atgttgaaca atagggcgca tgcccaatgg aattgcgata ggtgtcccc tgccaatgac 300  
 aatgaagaca cccgacgatg tctccaacaa gaacgatgcc cataaagcca tggctgtcct 360  
 caaggtgctc gtcaacaaag tta 383

<210> 6893  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-G10  
 <400> 6893

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 gtgcgccggc atcacctgtt acacccccat gaagtaccac gggctgaacg ctcccgggat 180  
 gcacctcggc gtgctggggc tgggcgggct cggtcacgtc gccgtcaagt tcggcaaggc 240  
 cttcgggatg aaggtgacgg tgatcagctc atcgccgggg aagaagcagg aggcctcga 300  
 gaggctaggc gccgacggct tcgttgtcag caagaacgcc gacgagatga aggctgcgat 360  
 gagcaccatg gatggcatca taaacacggt gtctgcaaac atcccatgg gccctct 417

<210> 6894

<211> 423  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-011-Q1-E1-G12

<400> 6894

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 taaaataggc atattatata tcaaaatfff cagaaaaaga tttcctacaa cctaaacata 180  
 tttatagcat caaatgaaat ccaaaaaatt caaataaagc aaagagtgc atagctctaa 240  
 taaaatcaa taaaaatcat tttaaaaaat accaaaatga tttcaaattt atttctctcc 300  
 aattttctaa tgtagtgaat cattttaccc tattttccat atattttatt tttggtgaaa 360  
 aataatttga ataaaaccca aataactcca aattgaaaat aattttaaag ggacattaaa 420  
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<210> 6895  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-G2

<400> 6895

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 tgagcttggg gtggatgtga tgctttgggt gcttggcggc ggattggtct tcagaagccc 180  
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 ctgtctggtg tcgtggtgac gtcgatagct gaggggccag acaaggtaca agcctcaatt 360  
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<210> 6896  
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<212> DNA  
 <213> Triticum aestivum  
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 ccgattcaaa tctaaaacat gagccggatc gctcgagtga tttttcgaag aggaaaagcg 180  
 ccggatcgct cgccacggtg agcaaaggat ggacgcgaaa tgaatagagc tggcttcagg 240  
 cacacggcgt ttctgcatgg atgcatgttc cccatgccgg gccggctccc caccatgcgg 300  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-H10  
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 tacattagct acagcgcgtt ctgggataca cgctactgct actactttct cttttccccc 180  
 tttatcattt agttttcttc acattttatt tttttccttt caccttaata tattttctttc 240  
 attttcaatt acctttctat ttgctttcca ttttaatttta tacccttttag cagtagcgag 300  
 tttagattaa aacgcgctgc tacaaagaaa gtagcggtag cgtggttcga tataggctgc 360  
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 caagac 426

<210> 6898  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-H11

<400> 6898

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gcaagcagat tcttggtctg cccagggcat cccactcac agatgtgatg gtgtgatagt 180  
gataatccat tggctagtgc tcctcttggt gtgtgatgat ggtaataaag cattgatttg 240  
tttggtgccg ccatgcccta gttgtggcca gctgcaaagc agcagttcct tagtgtaaca 300  
acagtcgata cattacgacc gtttgatggt acgcttggtg tattaataat ctttgatga 360  
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<210> 6899

<211> 346

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-011-Q1-E1-H2

<400> 6899

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gcagaggacg aaggcaacaa cgatgacggc actgcggggc gtcggggcgt cgtttgtctc 180  
agcaaagatg aagggcaggt catggcggag ctctggacc gtcgagagg acgaggggga 240  
ggcgatagcc gcggtggtgc tcgtcggtag cgtcggcgcg gtctggtgag gtggggaaca 300  
gccagggaga gagagccagg gaaggggaaa gagctccang gaagag 346

<210> 6900

<211> 233

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-011-Q1-E1-H3

<400> 6900

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tggccacgag tttgaggaac accaatagat gtttagattgg tgttaccgtc gacagacaca 180  
 agagtcagtg acacaagcag tacagtacgg tgtcgttctt atatctcgct gct 233

<210> 6901  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-H4  
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 ggatgcgtgc taaaaaagat tgctttgtga aagcgtgttc ttctagtttt catgataata 180  
 atgatgaaga tctaaaagtg attgatgtgg ctccatttaa acctttgttt tccaatatga 240  
 atcttgataa atatgggact ggcgattagt caactttagt taaaaggcgt ccaatgattc 300  
 ggagttttta gatcttgatg caaaaattaa taaaagtggg attgaagagg tcaaaacttt 360  
 acatagcaat gaaccacta ttttggattt caaggaattt aattatgata attgctc 417

<210> 6902  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-011-Q1-E1-H8  
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 atgttcagag tgtagataag aaacttatgc tactatagat ggatatatgg cattcggtag 180  
 atcgacagca agaagacgga tattcttttt ctgtaaaaca tgaccctttg attgatttgg 240  
 gttcactact aaactttcta atgcttcttc atacgactac cacctctgat taatctcctt 300  
 tggattcagt tatgtacttt tgtttgtttc caactatttt tcaactcgggt ttttgtgggt 360  
 gttggtagct ggaatgcaga gcatgaagtg gtgtaagggt gtgttgatgt gggacattgc 420

<210> 6903



<211> 277  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-A1  
  
 <400> 6903  
  
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 tcacgaaata gataatgtct ttacacacat tttgtctgta tctaatacatt atccgtatatt 120  
 cactcctacc aactggtaga ttcatgtttt tccctcattt gtctgcccatt tgtttcagaa 180  
 taattcacat tgacaacaat tacaataaag cagccactct agacgattct agcattcgat 240  
 atcttgaaag caaattcata gcgcttctat attctca 277

<210> 6904  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-A10  
  
 <400> 6904  
  
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 caacacaatg gtgtcattcc ggtggtggat aattgggttc aactgggtgg taaccggcgg 120  
 caaatgctc gaaaaagggtg ctccaaaact ctattgggta actgtcgttt ttctcgtgtt 180  
 tgatgtcttc ttctgtgttt tttgtgttgt tgtggcctgc ttcatggaa ttgcactgtg 240  
 ctgctgcttg ccttgtgtcg ttgcaatact gtatgctctg gttggccagg aggtgcatc 300  
 agatgcagat attggcattc tcccagata taaatattct gatcccagtg agaatggaga 360  
 aatggaacg gacgatgggg ttatgattcc taccctaat aatagtggaa catctacaa 419

<210> 6905  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-A12  
  
 <400> 6905  
  
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taaaaacaat tggggcaatt attgaaatga aagaaggaaa cattagattt caattccccc 120  
 caaggaaagg catggaacac tttccaagaa ataaaattaa gttaccatat gaatctatca 180  
 tgaggggtac ttatggatta aataccaaag atgacaatac ctagatcttt gtattatgcc 240  
 tagctagggg cataaaacaa tagtgcttgt tgggaggcaa cccaatttta ttttgtgttt 300  
 tttgtttttg cttctgtttt tcaataatta cacagtataa attctatagt aattatgtgt 360  
 tagtgtttta attactgttt gtgccaag 388

<210> 6906  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-A2

<400> 6906  
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 ctcggtctcg cgggaccagc ggacggcttc tttggtggag tgggtgcttca tccatacatt 180  
 gatggcgacg gatcttgacg gcgtggcgta gtgcagattc ggagttcgat gtgggaggat 240  
 ggactcgtgc aggaggacga cgctgtctgg cgctcgtggtg gcgtcaatgg cagagagacc 300  
 tgacacggta gacgcaacag tacagctctg aagatggact cgtggcaggt agctgcggcg 360  
 gcctcatacc cggcaggcat cctgattgag gagtgcgccc gactggtagg tgcccca 417

<210> 6907  
 <211> 339  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-A3

<400> 6907  
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 cgggccacct atggcatgtc tttcaggatt ggcacgtcca ctatggcatg ttcatgacgt 180  
 ctcataacga ctctgtctga tacatctaca gctgttataa atctgaatgt gagtctcatt 240

cataacgacc acactttcag gtctttctcat ccagtcaata ccacacatac cagcaacagg 300  
cttctcaata cttgacatca tatcatcggy acgtccac 339

<210> 6908  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-A4  
  
<400> 6908

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accaagatga gggccttgag aagctggaag agaccgtgct gagcacaaca catattgcgt 120  
tagcagtcac tgatgaactt gacctgcacg caagactgac tgatgacctt catgatcatg 180  
tggttggtac aaactcgcgc cttcagcgtg tgcaacagag gcttgcggtt ctgaacaagc 240  
gcgccaaggg cggctgctcc tgcattgtcc tgcctgctgc caccgtcggg ataattgatgc 300  
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ttcaagtgtg cagttcattc aaagacagta tggttac 397

<210> 6909  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-A6  
  
<400> 6909

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ggggagaaca gtggacttca agaacacgct cctgataatg acatcaaattg ttgggagcag 180  
cgtgattgag aacgggggga ggaagatcgg gttcgacctc gactcggacg agaaggacag 240  
cagctatggc aggatcaaga gcttggtgat cgaggagatg aagcagtact tccgaccaga 300  
gtttctcaac cgtctggacg agatgatcgt cttcagacag ctgaccaagc tggaagtcaa 360  
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cctgcatgtg ac 432

<210> 6910  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
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 <400> 6910

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ggaaaatgca accggaacc tgggaattgg gcatagaagg tcagttctga tgccagataa  180
tgtccacttg aaagagatga ttattagggtg cgcgcaagtg caattgtgca atgatagtgt  240
caattcggtta tttgttcaaa gtgacatgaa aacgaatatc ctacaactga gttggatctt  300
cactccaaca caacatcttt ttttgtggaa gaaatggtga caacttcact gcatatgaca  360
tgagtgtaat atatattaaa tctcatgttt catatgttcc aaaatc                    406
  
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<210> 6911  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
  
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 <400> 6911

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tgtacgcatt acatatgaat gaaacatatt cattaaccta agcatgccct caattttcat  180
taatgagttg atattatatt aattgaatat cctttatgtt ttacgagatt tttgctaaag  240
tttcatttac acctaattaa catcgaatag accctgttac tgtgagaatt cttaattcaa  300
gagttatacg gagggactta tgtcaccaca nacagaaact aaagcatgtg ttggatttaa  360
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tgat                                              424
  
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<210> 6912  
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<212> DNA  
 <213> Triticum aestivum  
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 accctgtctg gtctgaacgc cctgagctgg tacctcctgt caaagcctaa taatacggag 360  
 gaggttgtcg actgatcggg ccatcctgca ctggattttt acttccttac tgcacatgga 420  
 cctgcgcgat ga 432

<210> 6913  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-B4  
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 ccaccatggt caccatcacc gacaagaacg aggagcccat cggcccttac cacttcgacc 240  
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 ccggcgatgt ggagatcaag ttccggcgcg tcaagtgcaa gtaccgcggc ggcaccaagg 360  
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<210> 6914  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-B5

<400> 6914

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atcttgcgat gatcctagct atgcacatca ataaaaaacc gaagcacggg ggttcgggta 180  
ttggtcggca aaaaaattgg agggatagga tcgatgcca taatagattg atgaggtact 240  
atcttgtgga gaatcccaca taccgggagt cgtactttcg tcgccgggtt aggatgagca 300  
ccgagttgtt caggcgcatt gcagagaaac tagcgagcca tgaccgggtt ttttcagcaa 360  
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<210> 6915

<211> 374

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-012-Q1-E1-B9

<400> 6915

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caactcaatg ctgtggggtc atactgtcct tggttgcaaa tatcacgact tgcctcgctc 180  
aaatcatgac anacactatt cagaagaaat tcaagggttc ttcaaccag ctgctatatc 240  
agtctgtcc ttaccaatca ttgacctgt ntcttatcgg ccggttcctt gatggattcc 300  
tgactaacca aaacgtcttc gctttcaatt acacatctaa cgttgtgttt ttcaacgtcc 360  
tgtctgttt gaaa 374

<210> 6916

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-C1

<400> 6916

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 tttaccccc cttttttgac tttctcgtcg atgcaatttg taaagtccgg ttgaatttat 180  
 atgctgactt gacttgtgtg cgaagaaagg atgtttgacc caagtatagc ttctggtagc 240  
 tgcagccggt gattctttca tatgttggtg accgatctgc ccaccgccgt ttgctatgta 300  
 attcaaagag ctaattgagt gctgtactgt tcataccac tcagggttga gtaagagtaa 360  
 cccaacgatt ctttttacca aataagatgc ata 393

<210> 6917  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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<210> 6918  
 <211> 352  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-C11  
  
 <400> 6918

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ggtcggtcgc atcgctttct tccgcggcat gggcgggcag cggcagcgat cgggtccgtcc 240  
atcaatgcag tcggccttgt gcggtgggtc gttgaagggt gaggttgcta ggaaatggaa 300  
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<210> 6919  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-C12  
<400> 6919

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ccgcggcatc ttcttcagag gagccaaaga agctccagtc tctttccgta atcgccctca 180  
gaccatggca gaagtgaat aacaccgcga cccggggcgac ctttcagccg gtgtcgccct 240  
tgcccttgtc tcattctgat gcaataaggc ccgaagaaat ttgaagagtt tgtttgtacc 300  
tttgaatatt atagagcatg caccgagcag tcgtgatgtt tgaatcaaac cgtcgccttc 360  
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<210> 6920  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-C3  
<400> 6920

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gttaaggata aggattccgt tcctgcttgt gatgttcaaa aacctgcaca tgcatctgaa 180  
aacattggca ccaatgattc acaaaacttg caatatcctt caccctaattg gacctactgg 240  
gttgacctga tgagaacata agatgccaat ggcaatactc taaattttgg tgcgagtag 300  
gagcgtcaaa aatggcacc agaggacgag ctctggatct gcttaagggtg ttacgcagtt 360  
caataagtac ttttaactgtg ctgtgcagct tcttttcaga aacctgggac tgcaacttgg 420



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430

<210> 6921  
<211> 383  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-C4  
  
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gatgttgaga aacctgcaga tgcagctgaa aacaatgaca acaatgatgc agaagagttg 180  
caatatacctt cagcctagtg gacctactgg gttgacctga tgagaacata agatgcgaat 240  
ggcaagactc caatttttgg tgtcgaataa gagcgtcaaa gatggcaccc agaggaggag 300  
ctctggatct gcctaaagtg ttacgcagtt caataagtac ttttaactgtg ctgtgcaact 360  
tcttttcaga aacctgggac tgc 383

<210> 6922  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-012-Q1-E1-C6  
  
<400> 6922

aattcgcggg ccgacgggga acgtgctcac catcttcgag gaggaaggcg ggcggccgga 60  
cgccatcatg atcctgacgg tgaagcgcgga caacatctgc agcttcatct cggagaccaa 120  
ccccgggcac gtgcggtcgt gggagaccaa ggacagccag ctgacgatgg tggcggacga 180  
cctgaagccg cgggcggtgc tgacgtgccc ggagaagaag ttgatccagc aggtggtggt 240  
cgccagctac gggaaccgcg tggggatctg cggcaactac acggtgggca aatgccacac 300  
gccaaggcc aaggagattg tggagaaggc gtgcgtgggg aagaggagct gcgtgctggc 360  
cgtgtcgcac gaggtgtacg gcggggacct caactgcccg nggcacacgg ccacgctggc 420  
cgt 423

<210> 6923  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-C7  
  
 <400> 6923

attgccgggc cgacggggat gtatactggc cgactggcaa gattaactta tttaactatc 60  
 aacatcttag caaaaataacc cgatacaaac gccatgggtgc taacaccatg tgaaagagaa 120  
 ttgaagacat ataaattcct tttctaagaa ggggcgacct agccagccgc caggacgacg 180  
 gctccccctt accggcgacc tcagtcacgc gcggaggggg gtcaccggat ccacgcatgt 240  
 ggatcatgta gctttaggtc ttaggtagct tactttttcg gtcgttcacg gtcttggtct 300  
 gggcagcggc actaacgcgc ttgaatagat aagatcccca gctatcggtc ctatggttga 360  
 atatccccgc tatcgggtccg attgaattga aat 393

<210> 6924  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-C8  
  
 <400> 6924

gacgggggta ggcggcagcg atacgcggcg gctcgggtgca cgcgcgtgca aaacgtgcg 60  
 tctgggcgcg ccagagcgt gcacgccaac tgttcggcaa aatgccaatg cgtgccacag 120  
 ggcttgggtg aggctggcaa ttagcagacc taggttagga gtagctagga tcttagtgga 180  
 caaggttact gggtcagtgg attaagtaca cagtgcacaa taagaatcat gtcaaaactg 240  
 actatgcaca ccaagtgttc gacagaatgt catgggcacg taggcaactc ttgggggtggc 300  
 caaactctcc agatcatatt ctcttttagat gataaagagg gtggcaaggt tacttggtca 360  
 agaccagaaa ctcgtttagt caaaaatttg agaaaaccaa ttttgggcag aaactaaa 418

<210> 6925  
 <211> 194  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-C9

<400> 6925

ttatacttgc gctgtccgat ctgctccggg aggacagtga gtcttggtc gacaaggctg 60  
ccgttctata caagtcattcc acgggatggg aacgctgcat agattgcctg tgcattgcga 120  
tgcaactggca cgttctctcg tgtacaagat agtgtgtgag ccgagccgag ctttgttgcc 180  
cgtactgttt gtca 194

<210> 6926

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-D1

<400> 6926

cggtaagat atcccgggtc gacgggcttg atcaagagct acgccttcca tcgtactct 60  
tacacctccc ccgtgcaaat aagcagccgc cgccgagtct gccttgccaa tactctctgg 120  
agatgcaaag cctcccatgg gcgattatcc gaagcgctcag cagagtcggc tctgctgcgc 180  
ctcgtctggtg gcttccagct cttgcccagc gagatgcccc tccactcatg gagtcagtac 240  
cgtcttatcc aaatcaacat ctctataaaa ttttccgtga gaagcatagc aagctggatt 300  
tgccgtgcct ctcttctgt tctgtacta cagcagcatt ggataaagca gagaggatga 360  
aggcagcaga ggagagcaat cccatggtag agacaagtgc aatacaagat gtgtattacc 420  
agccaatcat cccgggtagc a 441

<210> 6927

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-D11

<400> 6927

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caaattgatt ggaaagaata acttgagggtg gttcgtaccc taccataatc tcttcatttg 120  
ttctccgcta ttatttactt tggagtgact ctttgttgca tgttgaggga tagttatgtg 180

atccaattat gttattattg ttgagaggac ttgcactagt gaaattatga accctaggcc 240  
 ttgtttcaat gcattgcaat atcggtttacg ctcaactttta tcattagtta ccttactgtt 300  
 tttatatttt ctgattacaa aaacattttat ctaccatcca tataaccactt gtatcaccat 360  
 ctcttcgcgcg aactagtgcg cctatacaat ttaccattgt aatggatggt ttgggg 416

<210> 6928  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-D12  
 <400> 6928

cggggcccgcg ggttaacccc aatcaaaatg gaggaattac caaggttgtg gattcacatc 60  
 aacaccagca gcaaagttga gtgtataaat cggaacccta acgtatcact tactcgtcgt 120  
 aagataatcc tgcacatga gacattgcat ccacatatgg tccgtacatt gaaagtactg 180  
 gcaaattcac accatataga atgatgaata aaggctatca ctacatgcat atttggtctg 240  
 tggaaaagct ctatggttat aagggttttg cgaaaagcca atttttccct actacaaagg 300  
 aataaatttt atttaactaa catggtgggtt gttaaacatt gagaatggtt gacagcattc 360  
 ccaatcccaa ttaactaaca tcattaaacc caacaactta aattaaagta 410

<210> 6929  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-D2  
 <400> 6929

ccgggtcgac gggaggatcc aaatcctagg gttaatcaat tttagctagt tgatgggaaa 60  
 atacgaatta atggtaatgg tcttagggcg atttagttcg gggaaagggg aaggggaaga 120  
 aaattctatg aaccttttct tttttttcgt taagttcaag tctgacgaga gtaatatctt 180  
 acgactaaca actcatttat tttgagaccg acccacttcc tatctaggat tttatttact 240  
 agtcctttat attccaacgt gtcaatcgcc aaatgctttg gcaatttccc cggttccgat 300  
 gaagcaatat aattttgaac cagacctttt gatctttggt tatctttcgt agtaataata 360

tctctggggtt tgcaacgaaa acttgggtata ttgactatac gaccattaac taaaatatgt 420  
ctatgggttg 429

<210> 6930  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-012-Q1-E1-D3  
  
<400> 6930

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tcatttctcc agaccagtac aagaagaggt tcaggaaggc catgtcaaag tacttcctaa 120  
ctgtccccga ccaatgggtca ccttgaatcg tcgtcacttg atgcctacta ttatttgcct 180  
attcgagtgc aagatgggggt gatggcgact gggaagcggg acattgtttt ctttctattt 240  
ttttctttgg ttttgttaga atagtcgacg gatctgcgcc ttttgtatgt tatttttgct 300  
cgcatcagge tggactggga tcgctggaga gggcgtaggg taaatgttgc ccccatccag 360  
gcagagccta tggatcgata tgtgtatatt atatataaca atgctacact gtaacatgaa 420  
atgaaatgca gacgaat 437

<210> 6931  
<211> 416  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-D6  
  
<400> 6931

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caggaacgcc ggctcgtcgc gatggctgac gccgcgagtg cgcttgtag agccctcacg 120  
tgctgtgag agctcgttcg agggctccgc gtcgcaccgg gacatctgtg ctgtggctgc 180  
ggcttcgcgg cgggacctcc ctagtgcttc cgccgccttg gtctttcctg cctgggtata 240  
tgtccaccct aaactcctcc taccgggtcat ggcggaacga cttgacagag aataccagtt 300  
tgggtgggtga tgaggagagg aactgtgaag taattttcga gtgggtagtt tttatagccc 360  
ggtgctaagt gtgaacacat attagtttga taggtgtgaa cagatttgca attata 416

<210> 6932  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-D7  
  
 <400> 6932

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 tgtgcaagg tatgatatac gtgaacgggtg aaggcatggg tcgctactgg acgtcattca 120  
 taactcctgg caaagtcgct tcccaggcag tgtaccatat tccacggcca tttttgaaat 180  
 ccaagaacaa cctattggtt gtatttgagg aggagcttgg caagccggaa ggcatactca 240  
 tccagacagt gaggagagat gacatctgcg tgtttatctc ggagcacaac cctgcgcaga 300  
 taaagccatg ggacgagcat ggaggccaga tcaagctcat agccgaagac cacaacactc 360  
 ggggattctt gaactgcccc ccgaagaaga ccatccagga ggtagtcttt gccagcttcg 420  
 gcaacccggg ggggtcatgc g 441

<210> 6933  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-D8  
  
 <400> 6933

cgacgggaag gacgccctca agttcgagga ggtctacatc gccgtcctct gcgtctacaa 60  
 tgacatcaac aagtacttgc cagggccgca ctacgacccc ccgtccaagg agaggctcaa 120  
 ggaactcatg agagagtttg acatcgacat gaacgggtctc ctggaccgcg aggagtctgc 180  
 ggagttcatc cggaagctga ccgccgagtc actctgcgcg atcagcctca agctgatcat 240  
 cacgctggtc gccgccccctg cgctggcgct ggcgaccaa agggcaaccg agggcgctccc 300  
 cggcgctggc aatgtagtgc acaagggtgc caatgccatc tacgccgccc ccatcaccat 360  
 ggctgccgtg ctcatccaga gatccgccc 389

<210> 6934  
 <211> 365

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-E1  
 <400> 6934  
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 caactgtggt tgtgcataat tatggttatg tcagacgtgt taattgtcgc aatttccaat 120  
 tgggtggtact atatatatgt ttgccaaata atgtgtgcac cgtgtgcaac tatggaacag 180  
 cgaagtggta atcattttgt gagcttttga acagtgaagt gacacaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaacacaa aaaaaaaaaa 300  
 aaaaaaaaaat aaaacacaat aaaaagaaaa aaccacaaca aaagaacaca aaaacagacc 360  
 cccac 365

<210> 6935  
 <211> 312  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-E10  
 <400> 6935  
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 agcaacctac cactaggagt gcatcatatt tacaagcgtc acagcacatt gcaaactctg 120  
 gccttaccac aaagccacat cattttgatc gccagattc cgacgaattc cgtatggctc 180  
 cacttgcgcc catgtctacg tccacgcaga cgccattaac aggatctgaa ccatctatag 240  
 agtgccggat gacttaatta ctttttgagg ctaacccgac cttgagcgac tcaattcatg 300  
 tgttgacaat gt 312

<210> 6936  
 <211> 343  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-E11  
 <400> 6936  
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gacacagcac tcctcctgcg cacgcggatt gccgtctcga tccacatgcg acagtgttgc 120  
 tccgaggeat tcaccatgtt ggccgcctct tctcagcacg tgaccaacca tacactcttc 180  
 ttacacatgc acggagtgtc tgcccatgta cacgtcatcg tcatcccagg ttacgtgtcc 240  
 aaaatcctgc tgatcatcaa gaaggactgc attgcacttc agctgctgac cgttttcttc 300  
 catggcaciaa ggatcgcggt aacacaacag ggatagacgt caa 343

<210> 6937  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-E12

<400> 6937  
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 aaaaacggcc ccaagggtac ggcccccaa taatggacgg ttcaaccatt ggagcacctc 120  
 attaaggtgt acgacggcga agatgaagca agacaagaca gataacatta atctgaagt 180  
 ggagtctaata agcatgtgaa tagatgatgt aaaatacatc accaaaaagt gctagatgta 240  
 aaatgcatca accacgccgt ggccgctctg acggatgctg taaatactgt tgactctgaa 300  
 cttaattgaa gaaactgaac ttacagtcg aaactgaatt ttactgtgga aactgaattt 360  
 tactgatgaa actg 374

<210> 6938  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-E2

<400> 6938  
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 gaccgtcact ttggcaacgt gtgtgagctt gacatcatgt tccatctgga gaaagtccac 120  
 ttcatgcttg aagagatggt gatgaatggt tgcacgtgg agacgagcaa acagaacata 180  
 ttggcgccca tccagcttat ggagaaaacc tcgtaaatag tgtgtgaact caagagcgcc 240  
 taggtgatgc ttagcctctt cctcccgctt tcacataga ttccccggtt gtgtgaggag 300



aaatgccgaa caactgctgt atgcatgggt ggctgtgttc acccgactgg aaaatgtgaa 360  
atgtttctgta atgttgaaaa tgaagacccc atcattactt aacaacagtt ctgtaaaata 420  
atactg 426

<210> 6939  
<211> 373  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-E3  
<400> 6939

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cacctgctgc cccctcaggt acagaatcct gtatatggct ggtatgacag aaccactgct 120  
gttagtagta catagatagg cctgtaattt gtgacactaa ttctttttcc tctctccct 180  
gatgccaaacg gcaaagcctt gttcattatt atcaatacga actacagact gctttagtagca 240  
ctagataaga gttgtgtatt cgatcccttt gagttttgat ggccattttc actgggacgc 300  
tcacatcttt gtatggctgg tacagtagca atgagaatcc tatgcccaaa aaaaaaaaaa 360  
taaaaaaaga aaa 373

<210> 6940  
<211> 273  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-012-Q1-E1-E4  
<400> 6940

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gaaggcgacg agatcgacgc catgcttcac cagaccggag ggtgctttcc tggcccttag 120  
aaggagcttg ctgcagcctg gctgttctat gtcgtatgct acctttagaa ctagagtaaa 180  
atgtaagaag tgaaagaact tgtgaggcta tggttctgtg ccatagcctg aagggggggtc 240  
tggagggtgaa acaacatcng agtactgttg atg 273

<210> 6941

<211> 133  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-E8  
  
 <400> 6941  
  
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 ctgaataagt tctgcggat gctgtgtat gtaatagcca gacattataa atatatcgga 120  
 tgttccactg tct 133

<210> 6942  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-E9  
  
 <400> 6942  
  
 ctgcaaaacta tcaagttata tacatatata cataaatggc cgcacaggag gcatcataat 60  
 actttcaggc aaaattataa acacaacctt tataatttaa taaacattgt tcttacaatg 120  
 ggaatacatg tctactagaac ataatatattt tcgagcacgg agcctctgtt aaacgagcgc 180  
 cttcaaggac ttcttcaaag tagtgcccg cgcatactcg gtctacggcc gaactgtggg 240  
 ttgcaatagc ggtggcctcc atctctgccc agtatgtctt gacacaggca agagccatcc 300  
 gcgcaccctc taggcacgcc gacctcttca tagcgtcgat gcgcggcaca gcaccaagga 360  
 actattgcac taaactagaa taacta 386

<210> 6943  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-F1  
  
 <400> 6943  
  
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 tcacaccacg tgcaaaacgt gttttagagc tttcattgga ggaagctcgc cagctaggac 120  
 acaactatat tgggtccgag cacttgcttc ttggattgct tcgtgagggg gaaggggtgg 180

cagctcgcgt acttgagtct cttgggtgctg accccagcaa tattcgtacc caggttgtec 240  
ggatgattgg tgagacaaca gaagctgttg gtgctggagt tgggggaggg aacagtggta 300  
acaagatgcc gacacttgag gagtatggga ctaatttaac aaaattagcc gaggagggaa 360  
agctagatcc tgttgttggg aggggaaccac agattgaacg tgcgtacaa attttgggc 419

<210> 6944  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-F10  
<400> 6944

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ttttcacaaa ccaacacaaa atcctaattg gtaataagtt ggattccaaa aaccaaagat 120  
tacaaaaagg ttcaaggatgc aaaggaaaaa aacctaaggc ttaggggaat aagattcctc 180  
ctgtgtctga tgacagggga atgcagtaaa catcataagc atcaaaacta tgatctggaa 240  
cagtatcctg aataaactat tttctggatt atgaatgaat tctgaatcat ggggctataa 300  
gtgaattatg taacatggat ttgtaactat ggtggatgtt aagttaacgt tctatcactg 360  
caaataaac aaaaa 375

<210> 6945  
<211> 182  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-012-Q1-E1-F11  
<400> 6945

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caacactatg atctggaaca gtatcctgaa taaactatct tctggattat taatgaattc 120  
tgaaacatgg ggctataagt gaattatgta acatggattt gtaactatgg tggatgttaa 180  
gt 182

<210> 6946  
<211> 372  
<212> DNA

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agcggttgga ttcttttagat ctaatgattt ccgaatatga agggaaatgt aaagaatctc 120  
 ctcccggtt cgagcatgac tccgctaaaa aattttaaac caaagatggc aatacctaga 180  
 tctattcttg cttttatgcc tagctaggag cgtaaacga tagcgcttgt tgggaggcaa 240  
 cccaatttta tttttgtttc ttgcttttta tttatgttta gtaataaata attcatctag 300  
 cttctattta gatgtgtttt tatgttttaa attagtgttt gtgccaagta gaacctttgg 360  
 gaagacttgg gtgaagtctt tatgatcttg ctgtaaaaaa cagaaacttt aacgctcacg 420  
 agattagctg ccatttt 437

<210> 6949  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-F4  
 <400> 6949

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 atgtttaatt cctactccct ccattccaaa atatatgtgg ctcgcgcttc ccgaggtcaa 120  
 actttgacca taaatttaac caatgagact gactgcatg ggagaaaaaa ttatataatt 180  
 aaaaacttct tttgaatatg aattcattgg tataactttt gctccgccc cagtcgatct 240  
 cgttggttaa atttatggtc aaagttgaag cacgggaata gaggaagcac tatatttttg 300  
 atcgagaga gtatgttttt taaaaaaaa tagactagca tactaataaa atgcaagaag 360  
 gcatatttcc ctttttgagg tgctgcggga aataactttg aaatattcat aggacaata 419

<210> 6950  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-F6  
 <400> 6950

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 tcatttgctt caacttataa ttttaaattt tcactattct actagcgcat ccctactat 120  
 gcaagaattt ttgtcttgga taagataggt tctagtgtta tagatgatat ggaggtaaag 180

agagtttact tgaagacgga gcatgggtat actttcaacg tcaaattata taatggagac 240  
acatacaccc attttgaatg caaaacttgg caagcactat gcaaggctta tgcatttgag 300  
cctgatatgg ttatcacctt tgatattcgt ccggaagatg atattgaagg taatatagac 360  
atctgggtcg atgtgcaaac gcctccagtt ctaccatttg gtgacttttt ctcaaccatg 420  
catgcat 427

<210> 6951  
<211> 399  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-F9

<400> 6951

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cctaattcac ccctgggcaa cttccaaatg attgactgac ggccgggaat aaaacaacgg 120  
tgctaaacag actcggcctt ggggtagatc cgtacggcga cggccaggcc cagtatcgcg 180  
agggggacca agaactggag gatcttgatg actaactccg gaagggatta aagttattgt 240  
taatgatgat gacttcagca ccatttttgc tgatattgag ggccctgctg gaactccata 300  
tgagaatgga gtattccgga tgaagctatt gttgtctcgt gacttccctc actctctccc 360  
aaaaagggtc ttctcgacaa aaataatcca tccaacat 399

<210> 6952  
<211> 366  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-012-Q1-E1-G10

<400> 6952

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aagaggacca aggacgccgt caagttcaag gtgcgctgct ccaggtaacct ctacacgctc 120  
tgcgctcttcg acgccgacaa ggccaacaag ctcaagcagt cccctcccacc aggtttgagc 180  
gtccaggagg tttaagcatc aagccagaca atgccttttc tagtagcggg aatgttctat 240  
ccatcttgct ttagtaactg ttagcaggct ctccttgttt acccccatta agagagtttt 300

gatgtcncaa gactggaatg taatgttggg agctatgtgg ttgaacctgt caggattttt 360  
gtgtaa 366

<210> 6953  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-G12  
  
<400> 6953

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tgcatttaaa ggaggatacc accccatcat accatatcat aatcattcta atagcatgtt 120  
ggcacgcaag gtaaaccatt ataactcata gctaattaag catggcacia gcaactataa 180  
tctctaaatg tcattgcaaa tatgtttact tcataatagc tgaatcaggc acgatgaatc 240  
atcatattta caaaaacaaa agaggtcgag ttogtaccag cttttctctt ctcaataagt 300  
ccatcatata tcatcattat tgcctttcac tgcacgacc gaacggtgtg tataataata 360  
agagtgcacg tgcattggac taagctggaa tctgca 396

<210> 6954  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-012-Q1-E1-G3  
  
<400> 6954

gggccgacgg gaccaaggaa aatacaagca ctggaacgag gggacagttt gtgtggcatg 60  
gtggacgcag tgtaggata gcaaaggcta ccgaaaacgc aaataaatga ataggatgga 120  
tgggtgatgt atagtgctaa gtatgggaag gaatagacca cgctgggcc tttccattac 180  
gtcttaattg tatagacaag tatgtgcaat cctgtctaata cttaccata aaaggagat 240  
cacaaatata tttcatggtc ctcggtttag ggaattagga gtatatcaca atcccgatg 300  
atattagtct gacagatatg aataaagata atctaagatg gatattaggt aatgattcat 360  
gttcagtaca tatattatct tacagccacc ttctttactt gttcaggccc gcagctgatg 420  
ctc 423

<210> 6955  
 <211> 385  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-G4  
  
 <400> 6955

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 tccatcaggg aatcgtgctt caacaattct ggggattcca agaggaaagt gaacccgacg 120  
 cactaccggg agccgaggtt ctacaccaag gtgtttaagg aatgccactc ctatgaccaa 180  
 gaggggaatt cctttgagct ttctctggta acttccaagt gcattggagc ttatgtgaaa 240  
 agcaagaaga accagaacca gatatgttgg ctgtgggaga aggtcaagtg cacagaagac 300  
 aaaggctttc agagattcct ggacaatgtg cagtacaaat ccactggaat cttgcgttat 360  
 gagcgcgtgt ttggggaggg ttatg 385

<210> 6956  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-012-Q1-E1-G8  
  
 <400> 6956

attcccgggc cgactatcac gatgtccggg gtcttgtcgc gaatgatccg catctccata 60  
 ctacgcgaaa atagccgagc gaagggtgtag tgcagcggat gaaggttcaa catactgtgg 120  
 atgtcatcaa aacgcatgac gattgtacgc ccgatggagt tatccacaaa gccattgccc 180  
 tctggcacct tggccgctaa aaccgggtat gccacatcct tctccctgag acgccgcgtc 240  
 tccaaagcac gaacactgtc atgcacactc tgcataaacac cagttgcagc attgaacata 300  
 tttgtcggtg gcattgccct acccgccaca tgcaccctcc tcgagatata ctgcggtgaa 360  
 cgtggcccgct cctgagcaact gatcatactc agtgccgggt ggctcgcacc cttcctagtc 420  
 tttcttttgg gtg 433

<210> 6957  
 <211> 385



<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-G9

<400> 6957

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 aaaagggcaa atctgaaccg aagattggca tccaagaact ccccttgcc aacttcaaga 120  
 aaatgttaaa tatcaggacc agcaggggaa aattaggagg tcatccacaa tggatctcct 180  
 ttgtgtctca aaccagcttc tccgtgtcct tggttattta cttgaacgaa actgaaactg 240  
 aaaactgtga ggatcgaact tcgatgtcct tagagctact ctgttttaac cttgggtttac 300  
 catctcttct tctttcactg tatgctttgt ttttcgcctt caaagatgag attgggcca 360  
 cgcttctagt cctcangcaa gacat 385

<210> 6958  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-H1

<400> 6958

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 cggggagcac aagaaggacg gcgagcacia ggaggcatg atggagaaga tcaaggacaa 120  
 gatcagcggc gacggccacg gcgacggcaa gaaggacggc gaccacaagg agaagaagga 180  
 caagaagaag aagaaggaca agaagcacgg cgaggggccac aaggacgacg acggccacgg 240  
 cagcagcagc agcgacagcg acagcgactg agccagctcc ggccgcgctc cggcagcagc 300  
 gtgcagtgtg ggcgagatcg atgaacgctt gggagaagtg tggcatacat atatgttgca 360  
 gggtttgag cgtgtggtag catatgtatg taatgcgtga catgtctcat ggatcntgtg 420  
 atgtataata attagccggc tgcactgca 449

<210> 6959  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-012-Q1-E1-H10

<400> 6959

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acatacgtca ttccctttgt catcggtatg ttacttgccc gagattcgat cgtcgggtatc 120  
atcataccta gttcaatctc gttatcggca agtctctttg ctcggtccgt aacgcatcat 180  
cccgcacta actcattatt cacattgctt gcaaggctta tagtgatgtg tattaccgag 240  
agggcccaga gatacctatc cgatactcgg agtgacaaat cctaattctcg atctatgccca 300  
acccaacaaa caccttcgga gacacctgta gagcgtcntt ataaatcacc gggttacgttg 360  
tgacgtttga tagcacacaa ggtgttcccc cgggtattcga gagttgcata atctcatagt 420  
cagaggaata tg 432

<210> 6960  
<211> 404  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-H11

<400> 6960

gggtcgacgg ggcagttggt gcccctctcg gagcagcagc tgggtggactg tgaccaatac 60  
gacggcgggt gcaaccgcgg gtcctttcac agggcctaca attggattgt ggagaatggc 120  
ggccttacca cggcagcgga ttaccatac acggcgggtga ggggcgcctg caaccgcgcc 180  
aagtccgcc atcacaccgt caagatcctt ggcggcggcg tgatcccgcc caggaacgag 240  
cccgaatgc aggtcgccgt ctccgggcag cccatcggcg tggctatcga ggtcggcagc 300  
ggcatgcagt tctacaagag cggcgtctac tcgggcccct gcgggacaaa tcttgctcac 360  
gccgtcacca tcgtcggcta cggcgtcgat gccctactg gggc 404

<210> 6961  
<211> 411  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-H2

<400> 6961

gaccggaagg aagaggtatg gaccgagatc ctccaggaga acgagcttgt cacgaccgag 60  
ctcgaggaga tcaccagttg ggggttcgtc gatgccatgt tcaatatcga cattgagcat 120  
ttggacaaca tgaacaagag caaggagcat gggttcctcg gcttccgtaa caccgtcaac 180  
tccttcaacg cttggatcga taagatgaag gcttccaagg ttgttccgtg atgctcttat 240  
tgtctagtat ctattgttgt ctacagcata tgctactgca tcccatttta tcaactcattt 300  
ataaatttac ttctgaaatt agttacatcc catcatttgt gccaaatgtt gtaatctaga 360  
ataagccaga accaaataaa gctcccaagt tgtaaatcga ttatctgtgc t 411

<210> 6962

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-H4

<400> 6962

gacctccgca gacactgtgg acctcaagcc aacgaacaac gacactggcg aactcatcat 60  
gcaccttgag tgggttaacc tcccccaag catgtcacag tgaattgatt tgacttgcaa 120  
agggagggca gctaattgtc gccttttgtg cttctaattgt tgctcctcg atatatgatc 180  
tatgaagata attaagcga gcctagctca ttcgttacat aacaccacc gtaatgattt 240  
gtggattaca acagcatggt gagtatagaa taggagcatc ttcgtgatga gatccgcaca 300  
tcatcacagt ggggtgctacg taatgcatgt gatatactta tgctgctggg ggtaatgcat 360  
gctttcagtt ttggttctgc atatattgta t 391

<210> 6963

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-012-Q1-E1-H6

<400> 6963

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gcttttccga tccagtgaat tagtgctggc tgccaaacgt ttgaaagagt agattatttt 120

ttcaaaagag tctggctgcc gggttgagcc cctttacttt tgccggaggg ttattatagt 180  
 ggtgtgggat tcatgcaac gataggttac agagacttta tatgatacgg ttagttttcc 240  
 catTTgcatt tgcaggacta gttatgacct cccctgtgtt tcttgggaga tttcctttct 300  
 ttactgttgt agaagtgcaa aaatgtcttc gtatgtacta gctacatata ggtagtagta 360  
 gctcgtacaa tgggtttagt agaacacacc attgtcatgt gctgttacct gcactt 416

<210> 6964  
 <211> 367  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-012-Q1-E1-H8  
 <400> 6964

ggcagcgcatt gatggcggag atcgacaccg atggtgacgg ctcatcgac ttcagcgagt 60  
 tcatctcctt ctgcaacgcc aaccggggc tcatgaagga cgtcgccaag gtcttctgaa 120  
 tcagttcatt tcacctcagc cgtccgatcc aggagccgat ccatctacgt acggcttcgt 180  
 atatcaattt catgcaacta cctactccgg tcccgatcca gcctcagctt cacctgaggc 240  
 cggccctaatt tttgtttgat caatTTTTTg ctactagtag taactagtga tgatcactgt 300  
 tgcaccattt atttatttta tctcgtcaca actttccagt gtttcttttc tttctctacc 360  
 tttttgt 367

<210> 6965  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-012-Q1-E1-H9  
 <400> 6965

cggtcgaaat acccgggtcg acgggtgggc acacaaatga ggggtcatgt ttaaagctat 60  
 ataatttagt tgctaacccc ttcatatctt tccaggattt acgggtcttt gatctttcct 120  
 ccatagccgc tataatctct ggctgtgtct tttctcttag ctcttgcaat cccattttct 180  
 tgactgactg aaaaccata caagctgtca atacaagttg gctgctgtca aaggtagagc 240  
 cagcaagaga ctgcagtaac gtaattgcat ctccagcacc ctttgtggtc accaaggcan 300

gccctaaaag ttaacataaa agatatagtg ttgggtagac atcaaagttt agtcaaata 360  
 acaaacaata ggacatagta acattttcag attaatacaa aaacag 406

<210> 6966  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-A11  
 <400> 6966

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 ctcaagccag agctgctccg tgcgattcag gactgtgggt ttgagcatcc ttccgaagtg 120  
 caacatgaat gcatccctca agccattctc ggaatggatg ttatctgtca agcaaaatct 180  
 gggatgggca agactgctgt ttttgtcctc tcaactctcc agcagattga tccggttgct 240  
 gggcaagtag ctgcacttgt gttatgccat acacgagagt tagcatacca gatttgcaat 300  
 gaatttgaga ggtttagcaa gtacctgtca gaaacaaaag ttgctgtctt ctatgggtggc 360  
 gttcacataa aaaaaca 377

<210> 6967  
 <211> 342  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-A9  
 <400> 6967

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 caatcaaacg ggccggttgg attaccatgt ccgttttgat gaaaacccca ataagaggac 120  
 acgatctctg ctttgacaag acgtgcaaata aaaactgcat cttgaaacat ggagcaagag 180  
 gcttaaaaat agttcgaaat aatgaccggg cagcgacgtg atgtgacgct acaaaagttg 240  
 tcagtagatt ggactcaaga aatattatac tctctgcgga tatatgtggg acttggtttt 300  
 cagagccgga cacgtttttt atgttcgaag gctattttgg ag 342

<210> 6968  
 <211> 367

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-B11  
 <400> 6968

gacggggaca ttcagagaga tactgccatg catcattctg ccgttacatt tattatgaca 60  
 cgcttcatca catgtcatat tgctttgcat gatcatgtag atgacatcgt atgtgtggca 120  
 aagccacctt tcacaattca ttcatacatg tcagtcttga ttcattgcac atcccggtag 180  
 accgctggag gcattcatat agagtcatat tttgtgctaa atagttagtt gtaattctag 240  
 agttgtaagt agataaaagt gtgatgatca tcattattag agcattgtcc cagtgcagca 300  
 aagatgatgg agactatgat tctcccacaa gtcgggatga gactccgggt gaaaaagcat 360  
 gtgttta 367

<210> 6969  
 <211> 336  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-B5  
 <400> 6969

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 gtttagggag agtatgtag gataaaccac gtatatgggt gtcgtgcgcg cagccgtggc 120  
 tggctagcta catgcgtggc cgggtgatct ttcgtgtgcg catgctagtt ggtagttgg 180  
 ctttgtggcc ggtgcgctgt gtgtgcatgc acgatgctat gcaagtttgt tagtcacgga 240  
 tagactcccg ggaggtgagc cagatgtgag tggccgggtg tgacggccaa ctaagtgggc 300  
 gtgcatgcaa gtcattggtgt gcgtgcgtgt gtgtaa 336

<210> 6970  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-B9  
 <400> 6970

ccccgagcac gcttgtacgt gatacctttc aacttgccaa agagaaagct cCGTgcatta 60  
 tcttcataga tgaaatcgat gccattggta caaagcgttt cgacaggtac aaatcttttt 120  
 ctgattccag ttcattgtatt tctgcacttt ctCagctatt tgctcaaatac acattctttg 180  
 gttgagagta cagtgaagtc agcggagaca gggaagtgcA gaggactatg ttggagttgc 240  
 tcaatcaact tgacggattc agtagcgatg aacgtattaa ggtgagtgtc tttatccatt 300  
 ctaaggacta atcatactgg tcttaaaaat cgttctcaaa gaaacagtaa caaccatacc 360  
 tttctatttt ttcaggtg 378

<210> 6971  
 <211> 62  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-C2  
 <400> 6971

gactcccggg cGacgggga tctccacagt gaggccgacc agGctctgca tgcgacccat 60  
 ac 62

<210> 6972  
 <211> 359  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-C4  
 <400> 6972

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 aacagccaat gcatgggtcg ctactggacg tcattcatag ctCctggcag agtcgcttcc 120  
 caggcgagtg ttgccagatt cgacgggcat ttttgagatc caggaccaac ctattggttg 180  
 tatttgagga ggaccttggc aagccgggag gcatactcat ccagacagtg acgagagatg 240  
 acatctgcgg tgttcatctc ggagcacaag cctgcagaga taaagccatg ggaggagcat 300  
 ggaggccaga tcaagctcat agccgatgac cagaacactc cgggattctt taagtgcc 359

<210> 6973  
 <211> 376  
 <212> DNA





tggaatata acacttagag caaaagaaca agtaatagtt acaactatat gcatatttgg 60  
 gtggtggagg ctctacggtt aatatgggtt tgcgaaaagc catttttttt cctacaataa 120  
 aggaatatat tttgtttaac tattatgtta cttgataaac aatgagaagg ttcctccgac 180  
 tcaatcccaa ttaagcagta ttaataaacc aacaaactaa ttacagtgt tgagatcaga 240  
 ataataattc aagaaccaga tactcaagat gtcgataacc ggggacacga ctaaccatga 300  
 ctactttgta cactctgtaa aggtttgaac acttttcccc ataagactc 349

<210> 6976  
 <211> 163  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-013-Q1-E1-E6

<400> 6976  
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 gcttcacac ggatgtcct cagttcggcc gatgagataa tgaataagcc gatgtgcttt 120  
 ggtgtaactc caacttgtag aggatcataa cgctcaaaac tta 163

<210> 6977  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-E9

<400> 6977  
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 aatatgggtt tgcgaaaagc catttttttt cctacaataa aggaatatat tttgtttaac 180  
 tattatgtta gttgataaac aatgagaagg ttcctccgac tcaatcccaa ttaagcagta 240  
 ttaataaacc aacaaactaa tttagagtgt tgagatcaga ataataattc aagaaccaga 300  
 tactcaagat gtccataacc ggggacacga ctaaccatga ttagtttgta cactctgtag 360  
 aggtttgagc acttttcccc acaagactcg atctcctccg ttggatttct cacacta 417

<210> 6978  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-013-Q1-E1-F9

<400> 6978

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 gctgtacatg ggcacgggtg agccggacga gcttcactta gattaggttt catgttgcac 180  
 gtaataatat gtatttggtg ttttgaaatt atgtttgtgg ttgtggaatc attttttata 240  
 agatgtccga tcaatatcca cggacgcacc gcgggtgggg gccggatttt ggtgtttgtg 300  
 gttgtacatg ctttaagtgt gcatgcaata cttgatatag tggagacata gtcagatatt 360  
 tgtcaggaag tgtcagctgt atatagaaat gcattgcaca aacgaatcct ttcccacctt 420

<210> 6979  
 <211> 287  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-G10

<400> 6979

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 atgttgcgtc catgtcatgt ttgcacacat actgaacacc attttctgta aactgttcga 120  
 gtccatgtt gaactgagaa tgttttgcct gttttggttg tgatcaaaaa ctatccagat 180  
 tctagtatgt gttgttccac ctacatcacc gtcacgttcg gcaaggcctt ctggattaat 240  
 gataaagtga tcagctcatc accggagaaa aaatcggccg ccctaaa 287

<210> 6980  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-013-Q1-E1-G11  
  
 <400> 6980

ctcacgggtcg acgggaaact taacatagac tcgggtttacg gtgagtggca tgccgagcga 60  
 ccgtgtgggg tcgagccgtg gaggaagggtg agacacgaac acgacagacg tgatttaaata 120  
 gttgggttttg ctcgatggcg cgatccaaca aaatgaaacg ttgggtttctc tccatttcca 180  
 ttttttctac ggaaaaacgg aaactatcca ctccattttc attcctattc caaggttgcc 240  
 ccgttacaac attccatcaa atacaaagga aaactaacca ctacaagaaa tatgtcaact 300  
 tgtgaccttg actattgggc actgaaagggt cattgttttt catttgcgac ctttttggtta 360  
 ccaaaaatag aagggtcaaaa g 381

<210> 6981  
 <211> 371  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-G12  
 <400> 6981

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 tcgagccgtg gaggaggggtg agacacgaac acgacagacg tgatttaaata gttgggttttg 120  
 ctcgatggcg cgatccaaca aaatgaaacg ttgggtttctc tccatttcca ttttttctac 180  
 ggaaaaacgg aaactatcca ctccattttc attcctattc caaggttgcc ccgttacaac 240  
 attccatcaa atacaaagga aaactaacca ctacaagaaa tatgtcaact tgtgaccttg 300  
 actattgggc actgaaagggt cattgttttt catttgcgac ctttttggtta ccaaaaatag 360  
 aatgtcaaaa g 371

<210> 6982  
 <211> 273  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-013-Q1-E1-G9  
 <400> 6982

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 acgagcgctt cgtgggtccag ttcccgagc ccaagccgct tgacaaaggc gcgcccctgc 120  
 tgtgcaccgg caacaccggt gtacaacccc atcaagtacc acgggcgtaa cgccccggga 180

atgcactcgg cgtgctgagc ctaggctggc tcagtcacat caccgtcaag ttcggcaagg 240  
ccttcgggat taatgtgaca gtgatcagct cat 273

<210> 6983  
<211> 316  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-H10  
  
<400> 6983

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tgaggagaac ggagccatat ctatcagctc atcgcccgat ttagaccatc aatccgttcg 120  
gggtcgacac ctatctcaac agcaaacga cgctgtatat gggaatgacc ttcactcgct 180  
cccaagatta cgcgctgcgc ctaagccggc ccatgaacat cagctttagt gcggaatccc 240  
cgcatataaa actacacatc tgattcgata tgatcatcct gtgtccatag attcacccat 300  
gatcgttgat gcaaaa 316

<210> 6984  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-013-Q1-E1-H12  
  
<400> 6984

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aggcaacca attttatttg tgtttttttg tttttgttct tgtttagtaa taaatcttgc 120  
gtctaccttc tgtttagatg tgtttttatg ttttaattag tgtttgtgcc aagtagaacc 180  
tataggataa cctatggtga tagttaattt gattctgcgg aaaaacagaa actttgcgcg 240  
cacgaaaata attttgtaa ttcacacaaa cgagcttttt cgttgattct tttttctgta 300  
gatcaataga caaattgctc aggatttcct attttggtag gatttttaaaa gttccagaag 360  
tattcgaggg ttacagattg ctac 384

<210> 6985  
<211> 397  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-013-Q1-E1-H9

<400>       6985

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gggaaaggca tccccctcct ttccgtcctt ccgttcaatt gggtaaactt taacttgga   120
gctatatttt taatcgccac aatataagtg ctttgcttgg agcgtcatgt atgatattag   180
tatttgcttt ttagttttcc acaatcatcc ttgctgtaca caccttttgg gagaagccta   240
cttgattaaa tttattagaa tactctatgt gcttcactta tatcttttga gctagatagt   300
ttttgctcta gtgcttcact tatatctttt agagcacggc gatggcttaa tttgtagaaa   360
ttgctagtct ctcatgcttc acttatatta ttttgag                               397
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<210>       6986

<211>       400

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-014-Q1-E1-A10

<400>       6986

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tccaagatg ctgttcgtca gatccaagat tggggagggc gccacggca aggtctacaa   120
gggcaagtat ggtgatcaga ttgtagccat aagagttctc aacagtggcg gtacccccga   180
acaaaaagta acacttgaag atcgtttcat ccgagaagta aatatgatgt gtaaagtga   240
acatgataat cttgtcaagt tcattggagc ctgcaaggaa ccattgatgg tgattgtgag   300
tgagctgcta ccagggatgt ctctgaaaaa ttacttgaac agcatccggc ccagccaact   360
agatatgcat actgcattat gctatgcact caacatagct                               400
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<210>       6987

<211>       412

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-014-Q1-E1-A12

<400>       6987

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 gtgcccccca aggggagtct gaattggact aggggagggg ggcgcggccc ctcttttctt 180  
 ctccctcttc ctctctttct ttcccccttc ccccttccta gtaggactag gaaaggctga 240  
 atcctactcc tactaggagg aggattcctc ctctccttgg gcgcaccaag ggctgaccgg 300  
 cctccccctt tgctccttta tatacagggg cagggggcac cctagataac acaaattgat 360  
 tgttccaagc cgtgtgcggt gccccctcc accatattct acctcgttca ta 412

<210> 6988  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-014-Q1-E1-A2  
 <400> 6988

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 aacttaatta caaatcttac caagcaagga acttaacatc agaacctaac aacaatatcc 120  
 accaattatc aacaaaggaa tgggtgggggt taaactgcag caaccaacct ttaacccggt 180  
 ggctaaccaa aactacgact gcaagcaact cttttgaggt ggcgcacacg agtccacata 240  
 ttcaccatat caatacacca ctatggatcc gctcccgctt ccctacgaga acgccatcca 300  
 tagcactcac gcttatcttg tgcaatttaa aagtatccac tttcacttgt ctatgaactg 360  
 tacaagcaac ccagaagtcc ttttcgcggg acacggctat tcgaatagat gatgttaacc 420  
 ctgcangggg gta 433

<210> 6989  
 <211> 218  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-A3  
 <400> 6989

acagggtcca tctacgttat tctacacgat tactctatag atcaatcact cctaattcac 60  
 tgcgtattaa atcaagtacg tactacggta tttttaactg aagttaaaag gttgggtcct 120

gttttaaggg tgcagatgta ctataacacg taagtcttac tatccaaatg cctcaccata 180  
ctcttttgag gtggcgacaca cgaatcaacg gccgcacc 218

<210> 6990  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-A4  
  
<400> 6990

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ctcccaatcc ggtcccaatg attgcctcca aaaacctcca aaaaaccccc ggcccccccc 120  
aatggcgccc cccttcttct caacccccctt caagccctac gtctaccaga gccaacaggg 180  
atctgtgacg gcgtttcaga tatccggtgg ggatgtgcag gtctgcacg tgatggtgaa 240  
gtcgcaggac aagttgactg cgaaaccag tacaatgtgt tacatgtccg ggaacattca 300  
gatggacaac aattacttgc ctgaaaacga tggaaggcgt gtggcagtgg atattttgga 360  
aaaagcataa ccagcactgt tttcttcaat cctggccctg atgatggata tgtggggatt 420  
tctgcgccat tt 432

<210> 6991  
<211> 378  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-A6  
  
<400> 6991

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gggggctgtt catcgcgacc aagtgatctg gccgctgagc agcgacgcca tggacgcat 120  
gattcgggag cagagcagct tctgttaaga aataaataaa gaggatcggg gctcgacaat 180  
gttgtggcgg tgtgttgggt gtgattgttt gtttgttgca gtggctgcat tcaactggctg 240  
ggcaccagga tctataagat aatgtgtacg tacgtacgta ctgtattcct gaacttgtac 300  
tgtgacgagc gagactcgct ttgtaacgtg ctattctgtt gaaaaaaatc atgcgaacta 360  
aaaaaaaaaa agcggcgg 378

<210> 6992  
 <211> 364  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-A7  
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 cccactccac gatccgtacc cgcgccgacg gcgacggcgt ctccatcttc aacgccacca 180  
 aagtgtgggt ggaccacctg tccatggata attgcgagga cggcatgata gacgtgggtg 240  
 ccatgtccac ggccgtcacc gtctccaaca cccacctggc ccaccacaac gacgtgatgt 300  
 tcttcggcgc caccgatggg aaggaggagg acaaggatgat gcatgtcacc gtcgccttca 360  
 acca 364

<210> 6993  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-A8  
 <400> 6993

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 gaggacgtcg gcgtgaggtg gaggtcggcg cgatgccgct ggtggccggt tgcgggtgtga 120  
 tgccgcaaga tgatgatggt gtggtggtcg gcgtcgcgag gatgtcatcc atgacaagat 180  
 ggtccatggt gaccggcgct gcgccggtgt cggctgtggc acaacggact ccatgcgaga 240  
 tggagcccga ctgtgcaaga agaaagatgg tggccatgca gtgccactat gtgaagatgg 300  
 cgggtgtgaag ctgccacaag aagagtcggt gcgatgccga cgatggtggt gtgatgccat 360  
 cgtcatcatg gaaagttggt gtgaagccaa caaagctgc ggtgcgatgc cac 413

<210> 6994  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-014-Q1-E1-B1

<400> 6994

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acataggctg tctggaatgc catgaggccg ggattgggtg atgaaatctt caaagctatt 180  
atattgggtct caagaaactt gcaatacatc aatattTTta atTTTTtgC tgacaccaca 240  
gctaccacct cttcactaaa tgacagatgt tgccagcaac tgcacatgga aggatttaat 300  
gttatattat gtctactaat caataacgag ggagatcaaa ttactgctct caaatattca 360  
cctgattgat tttgaaaaga gggTTaaaaa tgggtgttatg aatga 405

<210> 6995

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-B10

<400> 6995

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gtaagggagg gcatggcatc ccaaaggTtt ccatggTccc acttgtcttc ctcatattct 120  
atgaagtctc aggaggtccc tttgggattg aggatagtgt caaggctgct ggaccactcc 180  
tggaattgt ggggtttctt ctgtttgcgc tcatatggag tattccagaa gtcctaataca 240  
ctgctgagat ggttactatg tttcctgaga atggTggcta tgtcgtctgg gtctcttcag 300  
ctcttggggc cttttggggT tttcagcaag gctgggcaaa gtggctcagc ggtgtcatag 360  
ataatgctct ctatccagtc ctttttcttg actatgtcaa gtccagtgtc ccagctctcg 420  
ggggtgggct 430

<210> 6996

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-B11

<400> 6996

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 gattccttcg ccaaggctat tgctccatta ttgtcacaaa agattttgat tggacccgat 180  
 gcactaggta ttacgcctag atcggatatg aactccttca tttgcttctt ccgaagcagc 240  
 tatgtactcc gcttcacacg tagatcccg cagcagctc tgcttggaa tgcaccaact 300  
 gacagctcca ccattcaata taaatatgta tccggtttgt gacttacagt catccgaatc 360  
 ggtgtcaaag cttgcatcga cgtaaccatt tacgacaaga 400

<210> 6997  
 <211> 334  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-B2  
 <400> 6997

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 gggattggtg tatgaaatct tcacagctat tatattggtc tcaataaact tgcaatacat 180  
 caatattttt aatttttttg ctgataccag agctaccacc tcttcactaa atgacatagg 240  
 ttgccagcaa ctgcacatgg aatgatttaa tggtatatta tgtctactat tcaataacga 300  
 gggagattat attactgctc tcaaatattc acct 334

<210> 6998  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-B3  
 <400> 6998

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 aggttggtac agtctaccg ttcgtaagg tctagcgctt ctgaaagact atgtctcgat 180  
 catccgtttc tcaaacacca tgcagtgcga gaaaaccaac ggaggaggctc gagtcttgtg 240

gggaaaagtg cgcaaacctc tgcagagtgc atacactaat catggttagc cgagtcctcg 300  
gttatggaca tattgagtat ctagtacctg gattatcatg tgaatctcaa catgttactc 360  
taaaattaat tttgttggg 379

<210> 6999  
<211> 346  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-B4  
  
<400> 6999

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ataatttact aagtcgtgcg aactcttaca gtggtatact agcagatgta ggggaggtac 120  
gttggtacag tcctatcggt cgtacggtgc tagcgcttct gaaagactat gtctcgatca 180  
tccgtttctc atccaccatg cagtgcgaga aaaccaacgg atgatgtcga gtcttgtggg 240  
gaaaagtgcg caaacctctg cacagtgcac acactaatca tggttagcgg agtcctcggg 300  
tatcgacata ttgagtatct actacctgga ttatcatgta agtctc 346

<210> 7000  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-B5  
  
<400> 7000

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gttggcagag tctacacgtg cttaaggtgc taccgcctct gagcagacta tgtcacgatg 180  
atccgtttct caaacaccat gcagtgcgag aacatcaact gacgaggtcg agtcttgtca 240  
ggaatagtgc tcatacctct gcagcgtgta tacactaatc atggttaccg cagtcctcgg 300  
ttatggacat attgagtatc taatacctgg attatcaagt taatcacaac atgttactct 360  
aagaataatt ttggtggggt ctgtttaat 389

<210> 7001  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-B7  
  
 <400> 7001

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 ggtgaacctc caaatgatgc ccacagtcac tttctcacc acgagaatct tagatataag 180  
 atgcaagctc aagatcagta tgaagctcaa gatggcgccc attattttca gattaaccct 240  
 cgtccgtcca cataccaaga cgacttgtcg cgtctaacca caaagattgc tttcaaactc 300  
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 gta 363

<210> 7002  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-B9  
  
 <400> 7002

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 agaacaaagt gaaggctctc aacctcgtga acaagaccag gggcaagatc aatctcaaga 120  
 tgggtggtgaa cctccaaatg atgcccaagg tcaagttctc cccctcgagc aagttcaaga 180  
 ccatgagcaa gctcaagatc aagaacaagc tcaagacggc gctcaagata atcaagttaa 240  
 ccctcctcct tccacatccg aagaggaatt agagcgtcgt gccgcgaaga ttgcttccaa 300  
 gctcaccacc aaaggccatc tcatggagaa tgtggttgga agcctaagaa agggggtaat 360  
 cactcgtaga caattaacaa actattgtga acatcacgcc tttgtcccc 409

<210> 7003  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-C1

<400> 7003

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ttgatccttt gtacgctaaa ctgaagaaac ctcttcacga gtttcatcat gcatgggagt 180  
cgaagatatt agatgaacat cacatcctgt atgcagcaac ggatgcctac ctttgtttaa 240  
atatctacaa ggggttggatg aagaagcgga gcccggtgtc tagttcaagc aaagaagtgt 300  
cggcgaagag gaagaggaag agggattagg tcgaagtcca ggacgtggac tcggactccg 360  
aataggtggg aattccgtcg ctcatgct 388

<210> 7004

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C12

<400> 7004

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tccttccttc tttcccttgt ttttgtttgt cagcttcatt ggattggatc atatatacaa 180  
gccgcgttat ttgtttgctt ttgtcctgta gtttgccttt tgttttagatg tgttgagtaa 240  
caagtgcaat gcaagtttgc actcgtgtgt aaaatgcttg atttgggttc atgaatagaa 300  
aatttcaacc tgtcaataca gttcactcaa catatatgaa atc 343

<210> 7005

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-C2

<400> 7005

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gagcaagaac ttcacgggcc cgttcaagca ccaatggcca tccgcaacca tatccgcac 120  
acagtccttt ggagcacaat tgacatattt gcagcggacg tgtgatgagc agttttccat 180

ccaccgtgca aaagacccag agctgctcgg cggcatgata gatgaccac ctgaagagcc 240  
gccatcacag tgctcatcga gagcctgatg ccccgcaatg aatgggcaga ggacctccgc 300  
gattcagtca agacaaaggc agcctgcggc ttcattcattg cccgcaacgg ccatttcaac 360  
ctcgattccg atgatgtggt ggccaagatt gagcgcatcc tt 402

<210> 7006  
<211> 406  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-014-Q1-E1-C4

<400> 7006

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cggcaacagt gccgctatgt taaacggttg ggctatcaaa cgaactccga atgcgacgaa 180  
acttggcagg cggctctgtct acactataat aagaccacac gacaagttgc aacctattcc 240  
gagaacattt ttatgccact aataaaataa tattacggag gtgccgcggg cgcgtgcgag 300  
tgtagtcggg ctcagaacgg acaacggaga gaaccggcgg aacacgaacg gatgcaagtt 360  
ttgaaaaaca tgcagatgan atacagatga agtgcagatg atgaca 406

<210> 7007  
<211> 396  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-014-Q1-E1-D1

<400> 7007

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gctggcgctg gacatggcga gagggtgag ctacctgcac tcgcagaaga tcgtgcaccg 180  
ggacgtaaag ggggagaaca tgctgctgga caggaagaag tcggtgaaga tcgcggactt 240  
tggggtggcc cgtgtggagg cgcaggacga cgacaacatg acggggcaga cgggcacgct 300

ggggtacatg gcccccgagg tgctggangg gcngccgtac gaacacaagt ggcacgtgta 360  
cagcttcggc gtcctgctgt gggagacgta ctgctg 396

<210> 7008  
<211> 283  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-D11  
  
<400> 7008

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ctccagctct tcttcggcga gaccttcctt ctcaacggta acacgacgaa tgactccatc 120  
tgcattgttc ttgtgatta catctgtgat gagcctaaag tcataattat gagatctgtc 180  
aagagttaac tttagattga aagatgtgtc atgtgggtgtc tgttcatcac tacgcctagt 240  
ttcaatacat tacacgagtg tatataactta cttttaacaa tac 283

<210> 7009  
<211> 157  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-D2  
  
<400> 7009

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ggataattcc ttcacatca cgcactttct gttaatggtt ttgttcggac tcgttaacta 120  
cggcattaca gtgcataccg gctcccggtg atacatg 157

<210> 7010  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-014-Q1-E1-D9  
  
<400> 7010

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gtcaatatga ctgtactcca gtttcaacac gtcacatcac attgtcattg ccagggcttt 120

ccaaaaagcc acattagttt gataggccaa atgcagacaa aatacatttt gatatacatg 180  
 tgcacaggct catgtacatc caggagttag tagagtgtt cggacaactt acagcctgct 240  
 cactcaccta gattaccctc aaggcgatca tgacgctggt cgatgcactt gagctgttgc 300  
 agggccacaa aagggaacc gatggcgta acggagtcgg caatctattg gataaagtcc 360  
 taaatgcgat ttaatgcgac gtca 384

<210> 7011  
 <211> 360  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-E3  
 <400> 7011

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 caggggcaca tcgtatctta aagggtacgg tggttaagat gagttcatac gtacgaattc 120  
 gggttgatgta atctctcagc aatctgctga aaagcattca agtacgcaac attttatata 180  
 gagattgcta tttgactggt ccgcttagtc acagtgtgct ctgtaaatac attagctcat 240  
 cagacactgt ttaccgtcta cacatagcga acatcagatt ctaatctcaa gtaatgagtg 300  
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<210> 7012  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-E6  
 <400> 7012

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 gagattttac attctgttcg tggatttata tcgtagtctg ttcttcatac ctagaatcca 120  
 cgagaatacc aatcaaaaaga tggtacgggt agttcatccc atccgaatca atctgagcct 180  
 tgcataaact tttctgtaat agccttggtg atcttgccgt tgcactctacg tgttcaattg 240  
 ctggtcataa cgtctagtcc tctaaaattg ctacttctgt tcacatcttg tcacaccgta 300  
 actgcaccaa catcatctca cc 322



<210> 7013  
 <211> 327  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-F10  
  
 <400> 7013

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 atgaccaggt ggggagaggt atttataagg agcgcggtgt agtgaatta cgcaggtgcc 120  
 cctagcggtt cacatctgga tgacatgtgg aaagcatgca acttactgaa aattgagcca 180  
 atttcccccc ggccccctgt ttggttggaa ggtctttccg gcttcacggt ttttcaggaa 240  
 aaagggataa taccattaaa attggtttta atgggtgtacc cctaaatctt cacctaacag 300  
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<210> 7014  
 <211> 312  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-F3  
  
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 ctgcgacgcc aaagtcgatt ccaagtgggt caagaggatc cttgcaaata ggcagtcggc 120  
 acaccggtca cgcgtgcgca agctgcagta catctcggag cttgagcgcg cgtctcgtcg 180  
 ctcaacatgg aggtgtccgc attgtaccg cgtgtggcat tcctcgacca cgagcgctca 240  
 ctgctgaagc cggggaacac ccacctcaga tagagcattg cggcgctcac gcgggacatg 300  
 atcttcaaag at 312

<210> 7015  
 <211> 347  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-F4  
  
 <400> 7015

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 tccgttgagc tgatgtttgt ttcagctaga gaaatcgta cgcgcgtca taatttttcg 120  
 acgctatgga aaataataac tactggtata tcactctata tcaaaccggc ttgtgaaata 180  
 aatggttgcg ccccggtttt ttgtcgtcaa aaaaaaaaaac aaataaaatg gaaatatact 240  
 tttgcgatca agtagatcaa aacttaagta gccgttggtg caatctcata gatcctgaat 300  
 cgatgtcgcc acaatatgtt atacaggacg cagtttgaaa ccttcat 347

<210> 7016  
 <211> 297  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-F5  
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 gctgaatttg gttcactttt ggataagcca tacatcaggg aatcattcag catgaatacc 120  
 attgataagg gcgggagttt acctggcacc gcacagttgc cgtgtcaggc ggcgctccat 180  
 gggcgcgctt caaccgctag tattacacca catgtggttg catgttctct ttcacacaca 240  
 ttatgtggta ccagagcaca aaaactcaaa ggtaacacta tggaacaaac aactcaa 297

<210> 7017  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-F7  
 <400> 7017

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 cacttggtgt ctgggcacga cgaactttgg caacggtgca tactcgggga gaacaatttt 120  
 atcttgaaat ttagtgagag atcatcttat aatgctaccg tcaatcaaaa gcaaaataag 180  
 atgcacgtac gctactgtga ggtgttggtc ttctcttccc gccctcctct ttggtgtcct 240  
 gcttaattcc cctacacgta tgctactcta cccaacacg ttggacgaca agggcatctc 300  
 caccatatga tccatccatc ctccgtgcat gttgcctgcg ccatgcatgc gttgagctac 360

gacgaactac ccttctctac gtacccttct gtatgtgtat gtgtgtaaca gtatggttgt 420

g 421

<210> 7018

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-F8

<400> 7018

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gtctcggaga atctggggat cctgaaatga aattggagat gaggcgctac cgggagcctc 120

ggttctacac caagggtgtat acagggttgcc aatcgtaagg tcatgatggg aactcctttg 180

agctttctct ggtatcttcc agatgcattg gagcttatgt gaattgcatg acgagccatt 240

gccacatatg ttggctgtgg gacaaggta tatgcacagt agatacaggc tttcatgaga 300

ttctgaaca ttgtgcatta cagatccact 330

<210> 7019

<211> 232

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-F9

<400> 7019

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gcacaatcca atgccttgct ccgccacccg tctcccctcc ttgttactct ccgggccacc 120

tatgtgcacc cagatcttcc ttttctttct agcttcccgg ggtcttttgt gtctcccccg 180

gtggcggttt ggccgtcgca cctcgacgac attagccact gtgggatgaa tc 232

<210> 7020

<211> 332

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-014-Q1-E1-H10

<400> 7020

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 caacgggtgga ctccatggtt gtgtgggaga ttcgaagtct ggatctcgag gtgggtgatgg 120  
 cctttctgag gtangccgcg gtatgggaca tcccatccat cgatatatca ggttcaatgc 180  
 ggctcaatag gtgacacatg cgtctctttc ggagtcgtca ggcacttcct gtcgcccaga 240  
 ggtgaagcct caggcggatg ctacgcacga cgtctcatgc ggaggcatca agtcatgcct 300  
 gctnacagcg cgtgctgcat ggtgtttgtg at 332

<210> 7021

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-H11

<400> 7021

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 atttgtttca cagccgctc gaggcagcac atttctagaa actatataga tatatatattg 120  
 attttgattt ctacagaaat tttcttgtaa attagactga gataaaatca tttgtttgca 180  
 ttctgctgag aatatagttt tctctttttc ccatttttta tttttaaggc agactctcgg 240  
 ccgacgacgt ctctagtct gcacgatga ttttttggt agtacttcta caaatcctat 300  
 gtttcaaaaa gtttgctttg ccaagaggaa gtcacggata cgacattgag ctatgctcat 360  
 gacgtgttgc cgctggatgt aagacgaaca atacttcgac accgcca 408

<210> 7022

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-014-Q1-E1-H12

<400> 7022

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 tgcagctggc ggcgggtgctg aacggcgacc accagctaag cagcctgcag gagaggatca 120  
 gggagaggat gaacgtgagg gaaggcacct cctacatgag gagcgccgtg cggcgcttct 180

tcgaggccgg catgtcggcc aagaggatgg gcctcgccga cgacgaccag atcgtcaaga 240  
 tgaggccctc ccttaccacc agaatgacct cctccctgc agatcaagat gatagtccgt 300  
 agagagcaac gatgcataca tacataggat gaagattgat gttggaatta ccaaaatctt 360  
 agtactacac atacatacat aga 383

<210> 7023  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-H2  
 <400> 7023

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 accgattccg acaataagct caacctgcac gacgaggatg aggctgaaga cgtgtcctag 120  
 ggccccact tggggtttgt caatccctac agcaagatga tgattcctgc tctcacataa 180  
 agtcctatcg cgatccctcc ctttgctctg gttgctgcga atatcagcct ggccggggagc 240  
 atcatccgca gcatgagggt cactcatgac attctccact tctgttccgg ccatgttgtg 300  
 acagcggaca tccacgttat tgacgt 326

<210> 7024  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-014-Q1-E1-H4  
 <400> 7024

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 tgggttttcgg tagggaacgt cccacctttg aggacgaaac gatatccatt acctcttatt 120  
 getctcaaat tttttctcgt gtcaacattg aacaacatga gtgttgtgtg attttttatg 180  
 atttttcggg gtttggttgg acatttttat gcattaagtg agttttcaat gcatttatgt 240  
 gcataattca aatttgaact acatgcgcgt gctccagtgc atataaattc attgaaaaat 300  
 caaatctttg tccttgggtg catgettaag tcccatgcaa gaaatgggaa tgaatttcaa 360  
 acaccatggc accgttgatt gccggcaaaa cagtgaatg cctgggtttt 410

<210> 7025  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-014-Q1-E1-H8  
  
 <400> 7025

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gaatacctgc agcacgagaa ttcatggaa tgagcagtc gtagtcaag gcaatgccga   60
gtcttatttt taaaaagtc caggaagaca attgtacttc gtcaacatgt gccatttgct  120
tggaagacta cagtgttggg gaaaagataa ggggtgctgcc ttgtcgtcac aagttccatg  180
ctgcttgctg ggacctgtgg ctacatcat ggaggacatt ctgccctgta tgcaagcgag  240
atgcaaatgc tggaatgtca aatttccttc catcagagtc taccoccttg cttctctctg  300
ctattccctt gccagctgaa tcgacagctt tgtcttcttt tcgttcaatg gtagcagcat  360
ctctccaag gacaataagc cggcatcctt ca                               392
  
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<210> 7026  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-A2  
  
 <400> 7026

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ccagggaggt gtatggaagg ttcggttaga actgccgat gcgtatcctt acaggtcccc  120
ctcgattggg ttcgttaata agatatatca ccgaatgtc gatgaactgt ctggctccgt  180
ctgtttggat gtcattaacc agacatggag ccaatgttt gatcttgtca atgtgttcga  240
agtcttcctt ccacaacttc tattatatcc aaatccttct gatccattga acggagaagc  300
tgctgcactc ttgatgcgtg atcgccctgc ttatgagcaa aaagtgaaag aattctgcga  360
gaaatatgcc aagccagagg atgcgggtat aacccagaa gataattcga gcgacgaaga  420
gctgagcg                                     428
  
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<210> 7027  
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 <212> DNA

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 aaattaatta gaatcctaata catgcaatgt gtgaggattt gatctaatagc aataaaactg 180  
 ggtagtagaa aaggatatgat caaagtgtta cctgccttgc tgatgatccg ggaaacctag 240  
 cgattcgaag taacaagcgg cgcacttcgg gtattctatc gcagacaaac aaacaagcat 300  
 acaataagta ctcatctaata gcacgggtta aactcaaata agaggatcta aacagaaggt 360  
 tcaacttaag aactccggtt ggcaaaaaga atcagaacga atggaacaac gagagtcaaa 420  
 cggcg 425

<210> 7030  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-015-Q1-E1-A6  
 <400> 7030

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 gaagaagaag aagaagaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa 120  
 gaagaagaag aagaagaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa 180  
 gaagaagaag aagaggaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa 240  
 gaagaagaag aagaagaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa 300  
 gaagaagaag aagaagaaga agatgaagaa gaagaagaag aagaagagga agaagaagat 360  
 gaagaagaag aagatgatga t 381

<210> 7031  
 <211> 147  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-015-Q1-E1-A9  
 <400> 7031

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aattaagtat tcacttgata tcatcgatga acaaaanatt aaactctaata ggttgcccca 120  
aagtttaagc atctgaaaga ggatagt 147

<210> 7032  
<211> 343  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-015-Q1-E1-B1  
  
<400> 7032

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atgatctctt gaagaggtgg gctagcagat gtaggggaaa gtaggtgtac cgggccatcc 120  
agagtaaaga gtgattgttc ctgaaagact gtgtctcggc catccgtttc tcaaacaatca 180  
tgcagtgcga gaatcaagcg gagggcgatcg agtcttgtgg ggagaaatgc gcaaacctct 240  
acagagtgtg caaactaatc atgggttagcc gtgtccccgg ttatggacaa cttgagtatc 300  
tagtacctgg attatcattt gaatctcatc accatgttac ttt 343

<210> 7033  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-015-Q1-E1-B10  
  
<400> 7033

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ccaagaggaa agtgaaccgc acgcactacc gggagccaag gttttacacc aagggtgttta 180  
aggaatgcc ctcctatgac caagatggga attcctttga gctttctctg gtaacttcca 240  
agtgcattgg agcttatgtg aagagcaaga agaaccagaa ccagatatgt tggttatggg 300  
agaaggtcaa gtgcacagaa gacaaaggct ttcagagatt cctggacaat gtgcagtaca 360  
aatccacggg aatcctgcgt taagaccgct tgtttgggga gggttatgtc agcaccgggtg 420  
gattcgagac cacanaagaa tttgt 445

<210> 7034  
 <211> 182  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-B2  
  
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 tactatgctg cgctgtgttt ggaatttgaa ataaaacgat gggagatgtg ccacgctcat 180  
 aa 182

<210> 7035  
 <211> 214  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-B3  
  
 <400> 7035  
  
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 gatttccagt ttacaatgaa ctggtaacga gttgcttggg gttacagata ggctactgga 180  
 cagacgacaa cattttgtgg aacttcatcg tgac 214

<210> 7036  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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 ataggcgagg gtgaggagaa tggcgaggat gatgaggaag aacaagagga gcaggagggg 180  
 ggaggaggtg acgacgatga tgatgacgac gacaacgacg atgacaatga ggacgacgac 240

gatgatgacg atgatgtcgc tgctgaagac gatggagatg gagtagaaga ggaggatgat 300  
gacgatgagg aggaggagga cgatgaagac ttgctccagc cccgaagaa gaggaagaag 360  
tgaagccctt cgacgcggct gctttagtca acatgccacg agatgtgcct gtccttcac 419

<210> 7037  
<211> 293  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-015-Q1-E1-B8  
<400> 7037

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actgaaattg aaatgctgtc aaagctccgc caccgccatc ttgtgtcgct gattgggttac 180  
tgcgaggaca agaatgagat gatcctgggc tatgaccaca tggcccatgg aactctgcgt 240  
gagcacctat acaagaccca gaatgcgccg cttagctgga ggcagcgttt gga 293

<210> 7038  
<211> 321  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-015-Q1-E1-C10  
<400> 7038

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ttgcatgcaa cagggatgaa gaactggctg ccaattatct tttggatcat ggccatgagt 120  
ttgaggaaca acaatagatg ttagattggt cttgctgttg aaagacagaa gagtcagtga 180  
cagaagcatt tcagtttggg gtcgtttctta tatcttgctg ctgaatatca ctgctacttg 240  
ccattagtgc cttgttgctg actttcaatt tcttgatatc tggaaatgct ttctaagtac 300  
ataatatcat atgcaaacct t 321

<210> 7039  
<211> 117  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-C2

<400> 7039

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<210> 7040

<211> 379

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-015-Q1-E1-C9

<400> 7040

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agaaggacaa gaagcacggc gagggccaca aggacgacga cggccacggc agcagcagca 180

gcgacagcga cagcgactga gccagctccg gccgctgca gtgcanggga gatgaacgcg 240

tgggttaatt tggagcgtgt ggtagcatat gtatgtaatg cttgacatgt ctcattggatc 300

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ccattggtaa tttgtacc 379

<210> 7041

<211> 258

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-D12

<400> 7041

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aaacccccca ccggtttatt tcactttgtg agactgggag gggctggaag ctttttattt 120

ccaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acccaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaggggcc cccaaaaa 258

<210> 7042  
 <211> 371  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-015-Q1-E1-D2  
  
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 tcgttacgcc cgctcataat ttttcgacgc tatggaaaat aataactact ggtatatcac 180  
 tctatatcaa accggcttgt gaaataaatg gttgcgcccc gggtttttgt cgtcaaaaaa 240  
 aaatgaaatg taagcaaaat caataataaa aaaataggaa aaatgtttta aaaaatatat 300  
 gttgcaaggt ttagaaactt gtggtagcat ctgtacgtaa tgctttacat ttcccatggg 360  
 ttttgtgaag t 371

<210> 7043  
 <211> 342  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-015-Q1-E1-D4  
  
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 catccatta gcattctacc attttcctcg gagagaagta gccagaaaca gcagcgccat 180  
 ggccggcatc atgcacaaga tcgaggagaa gctccacatg ggtggcggca gcgacgagca 240  
 caagaaggac gaggagcaca ataaggcgga ggagcacaag aagaaggacg gggagcacia 300  
 gaaggacggc gagcacaacg agggcatgat ggtgaagatc aa 342

<210> 7044  
 <211> 406  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-015-Q1-E1-E3  
  
 <400> 7044

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 gacgtcgtag cagaagcgcg ccgccagctc gaaggccttg gcgccgcccg ggatgtcgtc 120  
 cagctgcagc gtgcacatgc cgccgccgtc cgacggcggc cggctactcg tgatcagacg 180  
 ctgcagcacg ccgctccggc tcaacagcgg gaactgcatg ctcataatga cgatcgatgc 240  
 accgttagtt agtcacatta acgcgcgcaa tcgatcgggtt tgtgcagttc agttgggtgaa 300  
 tgcgaaatgt gacggcgaca cactcgatcg tgctaacctt gtggagataa aaggacatgt 360  
 ctctacttcc cagcagcaca tcgctctcga gctcgggtcat gcatct 406

<210> 7045  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-015-Q1-E1-E9  
  
 <400> 7045

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 taaaaccgag ctttggcacc tctacaaatc cctgcttcnc tctgcgaagg gectatctat 120  
 ttactttcat gttgagtcac caccctctta ttaaaagcac tagctggaga gcgctgctgt 180  
 catttgcatc cattaactatt aatttatatt gggatatgact atgactggat ctcttttacc 240  
 atgaattaca atgtctagtc agtccttgat ctttaaagggt gctctgcatt tatgttttgc 300  
 ggtctcagaa agggctancg agataccact ttg 333

<210> 7046  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-015-Q1-E1-F1  
  
 <400> 7046

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 ttcagattgg acacgagaag ttccatgttc cttggcttta tggtattaat cgcaaaagct 120  
 ctgaagttcc attgactgat ttccatttaa gatacactgg aaacgatttg cttgggtgta 180

cggctaaagt agtggacatg cctcagcatt ttgtggaact tcatcctgat atagagaaga 240  
 ttttctggga tccacagaat tggcctaaat atgtacttgt aagttataca tgggaggaac 300  
 aatcagagat agatgttact gcaggattct atgtgttatt tggatctggc cttgttcttt 360  
 ccttcacctt tgcaatctat gtattgcaat catcgcagga taaattaaca aggtttgtac 420  
 gagaagcggg ttctg 435

<210> 7047  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-015-Q1-E1-F11  
 <400> 7047

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 tgacgatgta ttagaaaata ttattctatt atttgaaat ctttttgaag catttgaaag 120  
 aatttaaagt gtgtatagaa aaaatgttga ccatgtattc aagaaatgct gaccatgtat 180  
 gtgaattgtt ttaatcatgt atttgaaaaa tgtatatcaa gaatatgaaa tatgtttaag 240  
 tatgtataga gaaactgttg accatttatg aaaaaaaaaa tgttaaactc gtattggaaa 300  
 aaggaaaaag aaaccaaaga aaaaaaaaaa ggaattgaga aaagaaaaaa tgggttaaaa 360  
 cccatgaaag gaacaaaaag aaaccaaag gaggacgaaa gaagagacaa aaagatgtat 420  
 aatgaaaaaa ataaaacca 439

<210> 7048  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-015-Q1-E1-F6  
 <400> 7048

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 caactaaggt ggctatcacg cgtggcaacc ccttgtctga gcaaggcata catgagttcc 120  
 agactgaaat tgaaatgctg tcaaagctcc gccaccgcca tcttgtgtcg ctgattggtt 180  
 actgcgagga caagaatgag atgatcctgg tctatgacca catggcccat ggaactctgc 240

gtgagcacct atactagacc cagaatgcac cgcttaactg gacgcaacgt ttggagatct 300  
gcactctgtgc agcccgtggg ctgcactacc ttcacaccgg tgcaaaagca caccattatc 360  
caccgtgatg ttaaaacaac agtcacctc c 391

<210> 7049  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-015-Q1-E1-F8  
<400> 7049

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ggttcggctg cgggtgtgagg ctgccgtcgc cgcagggcct ggccagcggg gggaatagta 120  
ggggcggtga ggccctccgc gcagcacagc cggccatggg aggcaggagc atgcgacacg 180  
accggcgctg ctttgggtgg ctggagcaag aagaccagag gttgaagaag cactacggcc 240  
gttgatgga catcgtagcgc ttagtgagc tagaatcatt catattgact aagttgataa 300  
agcccttcat ccccatcaac ttagtaggccc cactagtcag cctcccacca aggtgggtcc 360  
cagctagccg ggggagtatt cttttttttg tgcgtaataa ggaggcactt ccgatggg 418

<210> 7050  
<211> 286  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-015-Q1-E1-G1  
<400> 7050

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gaaagcaaag gcggctttgg agaacggcgg gtcgctcgtgc atgaatctgg acaagctggg 120  
ccaatccgtc gtctgaaaat tagcgcggca tgcggccct gaataaattc tgctgctttc 180  
gtcattgat gacgagattg ggggtgtttc ttgcttgctt ggaagatcgg gattgagtga 240  
aaagcatatc ctatgttgta agttgcaact gtatctcatg ccaaaa 286

<210> 7051  
<211> 307  
<212> DNA



<213>       Triticum aestivum

<223>       Clone ID: LIB104-015-Q1-E1-G10

<400>       7051

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atatcttcct caaaacagcc accataccta cctatcatgg catttccata gccattccga   60
gatacattgc catgcaactt ccaccatcac catatacatg acttgagcat tcattgtcat   120
attgctttgc atgacgttaa gatagctagc atgatattct catggcttgt cattttttta   180
tgtcattgct acgctagatc attgcacatc ctggtacacc gccggaggca ttcatataga   240
gtcatatctt tgttctagta tcgagttgta gtattgagtt gtaagtaaata aaaagtgtga   300
cgatcat                                           307
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<210>       7052

<211>       431

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-015-Q1-E1-G11

<400>       7052

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gggccgacgg gccctttgat gtaccgcgaa taaattagtc gtcgaacgag tgattccgtc   60
ccgtgtggct gatgtgatct acaaaatgtg tggcttcttg cagctctgga gaccgcttag   120
taagcggagc gatcaaggca tcatcgacaa catcatgcgg gtcttcgtgc ctcggtgcg   180
tcttttgctc ctcccccgcc cctcctgag ccagattagc gtctcctagt agtcttattt   240
ggggcttgct ttgctgtgcc ccagcatgat tctatgactt attgtacttg taacttgatg   300
ttggatgctt ggtgttggat gcttggtggt atgctttata atattaaacc gggggaaacc   360
cttttccgtc attttttggg gtcaatgtcg agagagtga gtcacacca tcgccagagc   420
taaagtcgtg g                                           431
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<210>       7053

<211>       171

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-015-Q1-E1-G3

<400>       7053

gggccgaccg gatgctgatt gaagagttac taaatctttc gagaggcctg taccgatcag 60  
acctcacaca gtctgatctc tgtgcatcag tgtcatccct gaatcagtca cgctgagatg 120  
cacagtacgt gaatgattta taacacagta gcaatcgtcc acgtattaca t 171

<210> 7054  
<211> 232  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-015-Q1-E1-G8  
  
<400> 7054

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tacgagcatg cgcgtagtgc tttgggtttt gatgacttct aaatttttcc aacaagtata 120  
tgagttcggt tgacgaatgt tgagtccatg gattatacgc accctttcac cctccagta 180  
ttgctagcct cgcgtgtagc gtgcaacttt cgccggtgcc atgcagccac ca 232

<210> 7055  
<211> 441  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-015-Q1-E1-H1  
  
<400> 7055

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tgagtaggga ttgccatgca acggatgcac tagagctata agtctatgaa agctcaaaaa 120  
gaaactaagt ggggtgtgat ccaactcgct tgctcacgaa gaccaaggga aatttgagga 180  
agcccatcat tgggatatac aagccaagtt ctataatgaa aaagtccac tagtatatgg 240  
aagtgacaac ataggagact ctctatcatg aagatcatgg tgctactttg aagcacaagt 300  
gtggtaaaag gatagtaaca ttgccccttc tctcttttct cttatttctt tagtttgggc 360  
cttctctcgc tttttttggc ctcttttttc gtcgggagtc tcattctcgac ttgtggggga 420  
atcatggtct ccatcatctt t 441

<210> 7056  
<211> 450  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-015-Q1-E1-H11

<400>       7056

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ttaccgagag ggcccagaga tacctctctg atacacggag tgaaaaatcc taatcttgat   120  
ctatgccaac tcccaaacac cttcggagac acctgtagag catctttata atctcccaat   180  
tacgttgtga cgtttgatag cacacaaggt gttcctccgg tattcgggag ttgcataatc   240  
tcatagtcaa aggaatatgt ataagtcag aagaaagcaa tagcaataaa actaacaatc   300  
ataatgctaa gctaattgat gggctctgtc catcacatca ttctctaata atgtgattct   360  
ggttatcaaa tgaccaacac atgtctatgg taaggaaact taaccacctt tgattaacga   420  
gctagtcaag tagaggcata cgagggacac                                       450

<210>       7057

<211>       421

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-015-Q1-E1-H2

<400>       7057

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tgactctgcc ccttgacgcc tccagtgtat gaggttcgaa tacacctcgt ccattcggcc   120  
gattgagcaa ggtgcagggt tcttgattga tgtgtgttgc gattgatttc tgcagtgcaa   180  
gggagggcac ctggcctgcg tggactgcc a ctcgagcgc ctcgagaacc agcggcagtg   240  
ccagaagtgc gagcacgatg gtggcttcga catgcggaac acgacggtgg atgccatcat   300  
ttcgtcgctg aagggtggagt gcccgcacga aggttggtgg ctctgcatca cttaccacaa   360  
gctcgccgat caccagagca tgtgtctgct cgcgcctcgc anatgccccg tgcctgtctg   420  
c   421

<210>       7058

<211>       229

<212>       DNA

<213>       Triticum aestivum

<223> Clone ID: LIB104-015-Q1-E1-H3

<400> 7058

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aggaagacat cgcgagatg gtcacagtgc tgtacgcttc gtaccacctc ctcaacctgt 120  
agaggatggc caccggcgac gtttcttggg tgatgtgttc ttcacatgat ttctgccttg 180  
caagggatgg cacctctgct gtcttcaatg gcatgtctaa ctctgcac 229

<210> 7059

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-A10

<400> 7059

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tagctgtctg ctccgcatct gcatggctgt gagcatgccg tcccatcgaa catggtggtg 120  
cccaagggct cgggtacgcy ccttcgcgtt ctgcgcactg caccacggc gccacgatct 180  
acaccattgt cgtcgtgcc accgtcattg tacaccacca cagagtacag tcctgagaag 240  
gttctgcagt caaagcgctt acgctcagga cgagcacata cgaacgccgt ccatgaactg 300  
tgcagatgca acaggttccg agctgtatcg aaacacgtca tgacatgaag acagcagtca 360

<210> 7060

<211> 469

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-A11

<400> 7060

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tatcaacggc tctgcagaat gcacgagttg cttgtcgagg ttaaggcacc gctagataag 180  
tgcaacacat aataatatca agtatgtcat gatcttggag ataagtcaa cataaaaatg 240  
tcaagtatat catgaccttg gagataagtg caacataaaa atgtcaagta tgtcctgac 300

tttccaggca gaattgctgg gatttggtta actgcacaaa cattcttgat cagcgcttga 360  
 tcactagatt tatacttaag cacttgataa caaggcactc attgggttg tgaaaacata 420  
 tacagctaaa gaagaatatt attattgaca atctagggtt aacaaccac 469

<210> 7061  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-016-Q1-E1-A2  
 <400> 7061

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 cggacctcgt cttcatcatc gacgagaagc cgcacgcggt gtacaccgg gacggcaacg 180  
 acctggtggc gacgcagaag ataccgctgg cggaagccct gacaggctac acggtgcacc 240  
 tgacgacgct ggatggggcg agcctgacgg tgcccatcag ctcggtgatc caccgggggt 300  
 acgaggaggt ggtgcgcggc gagggcatgc cgcttcccaa ggaccatcc aggaagggca 360  
 acctgcggt caagtgcac atcaagttcc ccgccaggct caccgccgac cagaagtccg 420  
 gcgtcaagag gtcctgnng cagtanagca ggtctgtgtg tgttgttg 468

<210> 7062  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-A3  
 <400> 7062

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 ctgacagatg gaacaaacca agtggcccggt ctacctcagc acagaggagg cccgtaagcg 180  
 aggctcttca gaacagcaag ggtaaggaga tgcagaatga gcctccaagg acaatggatg 240  
 cgctctttgc acagatgaag cagcaacgga tgagggtcat gccaccgag caacccaaaag 300

ctcctaccaa tggccatcag tttaaccagc agcggcgtgg tcagcagcag cggcgaggca 360  
gagggggata tgggtgtccgc agcgggtggtg gtaaccgttg agcatggcac ccatatagaa 420  
cattatcact ggtgttcctc ggaaaggaga agcctcacc c 461

<210> 7063  
<211> 462  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-A5  
<400> 7063

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cgagacgaag tggcagcgca gcgtggaccc tgtgttcgag gagttgttat attgatatat 120  
actgatataca tatataactt cgggtggacgc tggacaaggt ggacaggggc ttcagattgt 180  
atccccatac aaaatcccg tcccaattct acaagccacc tgaccagggga aacctactct 240  
ccgggtctcgt ggctgcgaat aattttgagc tcggaacact ctgtttgtgg cttgccgcct 300  
ttcttttttc ggctgtgtgg accttttaca gcttctgatt tttctcgcac ctccagggag 360  
ccggaacaaa cacctgtttg taccgatccc cttttcatct tttcctgatg aactgcttgt 420  
attcggaata aatccacctc gtgtgatgat ggaaggaacc tg 462

<210> 7064  
<211> 461  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 7064

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ccgacactgg cgagctcatc atgcacctgg agtgggttaa cctcccccca ggcattgtgc 120  
ggtgatttga tttgatttgc aaaggagggc cagctattgc cttccttttg tgatcgtaat 180  
gttgcttcct ctatatatga gctatgagaa taattaagcg atgtctatcc cattctttac 240  
ataacaccca ctgtaatgat ttgtggatct cacaccagga tgggtgctct ataatatgag 300  
caacgtcttg gtgagacca cacatcatca cattgggttg tacgtaaggc atgtgataga 360

cttatgctac tgggggtaat gcttgttttc agttttgggt ctgcatatgt tgtatggcta 420  
 ttttaattaa aaaaaggat attttgtccc aaaacaaaaa c 461

<210> 7065  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-A8  
 <400> 7065

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 atacttattc ctctttgtgg ccaaagcttt gccgttgta cttaatgatg cttcggaaat 120  
 gggggttatc ctagatttcc ggctaaacag acatgctcca ggtatatctc atctaatttt 180  
 tgctgactga tagactocta tttttctaaa ggtaacttac agcatgctct aaatgttaaa 240  
 ggtattttgt cggcatatga cgatggaatt ggacaactat tatgtccgga taaatgtacc 300  
 atcttaattg gcaaaaaatg ttcaaaggag gaccagtgtt ccacctgat tacccttaaa 360  
 atcacgatcg atggttttga cgataaatat ctgagcttgc ctgcaccatc acttttgaaa 420  
 gctttatctt ct 432

<210> 7066  
 <211> 463  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-B1  
 <400> 7066

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 ttgcacttcc caaaggtttt tcacaaaaaa atggagataa atatattcca tattggcctg 180  
 ctgcactata tacagctgtg cccagtcgct catttttccc taggggattc ctgtgggacg 240  
 agggcttcca tcagttagtc atttggcgct gggatgcccc tatatccatg gacataattg 300  
 gccattgggt ggatctaatt aatgcggatg gatggattcc tcgagagcaa atattagggg 360  
 ctgaagcttt aagtaaagtt cctgaggaat tcgttctgca gtatccttcc aatggaaacc 420

ctccgacatt atttcttgcg ctgcgtgact tggcaagtgg cat

463

<210> 7067

<211> 476

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B11

<400> 7067

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gggaagaggg ccatgtacga cgccgggctc tttgatcccc tgcacgacga cgaccaggat 120

ttctcggact tcatgcagga gatgctggtg atgatggata gcgtgaaaaa cgagaagccg 180

gacacgctcg aagacctgca gaagatgctg gatgacatag tcaacggcga cggcggtagc 240

cgcgccactg ctggtgctgg tggtagcggc ggcggtggtg gtggctgcgg tggtcgcgtt 300

ccaccggagg ccaaccgcag aactcgtgtc gcccttacc cgcagccttc gogaaggtga 360

tggacgcgcc ggtgctcgtg acgtgcacgc accgctgcgc ttgtaggaga gagatcagag 420

caagaagaga gcaaccagcg tgaaaaaaaa cattagcaaa tcagaattgt tgctcg 476

<210> 7068

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B2

<400> 7068

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ctatcatacc acatcacacc cattttaata gcatgttggc acacaaggta gaccattata 120

actcagagct aatcaagcat ggcacacgca acgatgatct ctaattgtca ttgcaaacad 180

gtttattcat gacaagctga atcaagaacg atgaactcat catatttaca caaacaagaag 240

acgtcgagtt cgtaccagct tttttcatcg cagtcagtcc atcatatata atcattattg 300

cctttcactt gcacgaccga gcgatgtgga taatcataat agtgcacgtg cattggacta 360

atctggaata tgcaagcatt caattcaagg gagaagacac ggtaatatgg actcttggtt 420

aaatctacaa tcatgtatat 440



<210> 7069  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-016-Q1-E1-B3  
  
 <400> 7069

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 aagatcccc aaagacaagc tcatttgaga ggggctaagg ccggaactgc aaagatacat 180  
 gcagcgatta tcttctcaga agaaaagacg acatatctgt actattaagg tattttgggt 240  
 cacttacgac tcgtgggaga attgatcccc ccaaggactt tgtgcggcaa ccgcgcccc 300  
 cggggtagga ccctctgtgg gagacttctt ctcccgtttc gaagcttcgg ctccgaatc 360  
 cccaaacgca atccttttcc tcttctggtc gtcttccttc atgaagacgc tcactccctc 420  
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<210> 7070  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-016-Q1-E1-B8  
  
 <400> 7070

ccgggtgccc ctccgaggac gaggtgcagc gcatgatggc ggagatcgac accgacgggtg 60  
 acgggttcat cgacttcagc gagttcatct cttctgcaa cgccaacccc gggtcatga 120  
 aggacgtcgc caaggtcttc tgaatcagtt catttcacct cagccgtccg atccaggagc 180  
 cgatccatct acgtacggct tcgtatatca atttcatgca actacctact ccggtcccga 240  
 tccagcctca gttcacctg aggcgggccc taattttgtt tgatcatttt ttgctacca 300  
 gtagtaacta gtgatgatca ctgttccatc atttatttat ttatatcat cacaagtttc 360  
 ttttctttct ctaccttttt gtcgatcgtc ggctccagct cgatccaacg atccatgctg 420  
 ctaattgttt gtgtacgggt gatttaagta acctgtgcac t 461

<210> 7071  
 <211> 330  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-B9

<400> 7071

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 gacgcgcggg ttgtgccggg tgaggccggc tcctcaatca caagacggat tgaaaacttc 120  
 aattgtgctt tccaaaatga atttacccca aatttacc aaattacc ttaaataatt 180  
 ttccacaatt tttttccgtc acaaaagtta actcaacctt tgtgcctaag ttaatgaatt 240  
 ggtggtgggt ataataccat tatatttaca caaatatgt ccccatatat agtataaaac 300  
 cttctcttat atatctcaa cttatcacga 330

<210> 7072  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C1

<400> 7072

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 gagatatgcg gggatgtcct gggcgaggtc gttgaggagg cgctgtcaga gctcgcggg 180  
 tgccgttgat ggatgtcct ctttatttgt ttgccctgct cgcgggtgggtg tccaccgggtg 240  
 gcttttattt ccgatctggt ggagaccgtt tgctgaggac cggcgcatct tggctccttg 300  
 tgtgtgtgtg tgtgtatagt cctcttgac tgcctgtat gctccagtca agtgtgcgtg 360  
 cccactcccc tctctctgtc gcgccacatg ccgttacagt tgatacatc tattctacag 420  
 taataatgat cgtgaatgat accaagaaaa aga 453

<210> 7073  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C10

<400> 7073

ggggggctcg atccactaac ggtatcggtt gcacgagtcc acggacggct ccacccatcg 60  
atgggtccac ctttaagcaa ccaccacat cgggtctacg caagaagcaa ccacccatat 120  
agggtcgacg aagtagcaac cttgtctatc ccaccatggc catcgcccac aaaggacttg 180  
cctcactggc ggtagatctt cacgaagtag gcgatctcct tgcccttaca aactccttgg 240  
ttcaactcca caatcttgtc ggaggctccc aagtgaacac tagccaatct aggagacacc 300  
actctccaag aagtaacaaa tgggtgtgtg gtaatgaact ccttgctctt gtgcttcaaa 360  
tgatagtctc cccaacactc aactctctct cataggattt ggatctgggtg gaaagaagat 420  
ttgagtggaa agcaacttgg ggaacgctat agattaagat t 461

<210> 7074

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C11

<400> 7074

gacccagtta tagccacgac caaataaacac gtagcactac ggctatttaa gccaccctct 60  
gcctctgcca tccctcatcc atctgccctt cttgctcttc gaccccttct ccgtcttctg 120  
catatccctc agccatgcag tacaccggac caacctactg cttcccaccc accgtgccgg 180  
agaggctcta ccctaccggc gtgtacgttg atcgcatact atgtgtgtgg gcgatatcaa 240  
ggctgaggac cgcaaggaac ttcgccgagt tcttctctgc gtcgggtac caccatctcc 300  
cgaggggatc tccaacgatg ttccgcgtcg aggaggtcat ccaaaaccgg gtggtagtgtg 360  
ctctccttgc ccacttcacc aacacattcg acgccttcta cctcctcggc cgggtgtttt 420  
ggtgtggctc cgagttcatc gctttcacc 449

<210> 7075

<211> 442

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-016-Q1-E1-C4

<400> 7075

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gcaacgagggc ggtcgaggag gcgcggatca agctgctgga gctgcggcag gtgaacaagg 120  
tgaaggctct cgtcggcgcc ttcgagaccg tcatggacga caacgaaagc cccgtcgccg 180  
cccgcaagtc gcgggtgaac cccacgcct gaactacatt caacgagcac gaagctcgat 240  
tgctgctgct tcctttatcc ctgctactct ttaatcacc atcaaccaa tttgtcgctg 300  
tcgcccactt atctataatt acggtaccgc ttatatattg caaggaggaa gatgatggag 360  
gggttattat gatgtaataa taataatgat caaggaggat aaaanaaaaa aaaaaaaaaa 420  
aaaaaaaaaa gcggccgctc ta 442

<210> 7076

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C6

<400> 7076

ccggggcgcc gggcaacggt gaaaagaatt tgacaggtct tggagaaaat acataagact 60  
gatgataatt cattcttacg tcaaaacttta aaaagaattt gagaagctcc gggaaaatta 120  
gaagagtcag gtaagatcct gggaaagacc tgtaggttag ggtcaactca aaagaaacac 180  
cgttgaacaa tttaaaagcg aaattgcgcc ggttgaaata aatggcttga atgaggtaac 240  
atccttaaaa gaacttgatt gaaatgagaa tggaaacttg aaccttctga gatattttcg 300  
aactccgaa acaattgatt accaagaatt ggatgattta gaaggtgcac cgacatgaga 360  
aaccatttga accaaaaaaaa agatatgatt a 391

<210> 7077

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-C7

<400> 7077

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tgatgggttca aatgtggaaa tttgcgggca aggttctgtc ctcttcgagg gtctcatagg 120  
 agaacatcgc atactcaccg gagtatacta catcccaagg cttcgcaaca acatcatctc 180  
 tgcggggaaa cctgacgaga atggatgcaa ggtggatatt gagaacggag tgatgacgat 240  
 cttcgacaac ctctcaaacy tgctagcccg tgtaaactgc acacggaaca agctctatat 300  
 cctcaacctt gatcaatccc aaccggagtg cgagctcgcc aagagtgatg atgattcgtg 360  
 gttatggcaa tgctagattt ggacacgtca acttctacac cttgaataag atgtogaaga 420  
 tggagatggg atctgggatg ccgtttattc accatg 456

<210> 7078  
 <211> 476  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-C9  
 <400> 7078

ggggtggccgg ggggacgagc gatgggtcttt tcctaccaat ccatccccct aggagcatgt 60  
 gcgtagtact tcgtttcgat aactaataga tttttgcaat aagtatgtga gttctttgtg 120  
 actaatgtta agtccatgga ttatactcac tctcaccctt ccaccattgc tagcctctct 180  
 aataccgcgc acctttcgcc ggtatcatac acccaccata taccttcctc aaaacagcca 240  
 ccatgcctac ctattatggc atttccatag ccattccgag atatattgcc atgcaacttt 300  
 ccaccgttcc gtttgttatg acacgtttca tcattgtcat attgctttgc atgatcatgt 360  
 agttgacatc gtatttgtgg caaagccacc ttcataatta tttcatacat gtcactcttg 420  
 attcattgca tatcccgga caccgccgga ggcattcaca tagagacata ttttgt 476

<210> 7079  
 <211> 469  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-D1  
 <400> 7079

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 caagcaataa ttttgttgta taagtcaatc atatgatact tcacaattgc taatacaaaa 120

ggtaggatg gacatacagc acaagatagc ctttcttgct cgtttctcaa aagacatggt 180  
 tccgttggcc aagagtttaa cctgggtttg ccgtttcatg ctcaagaata aggataccac 240  
 aaaggaatcc ggtcatataa aagcatatag taaaaagaag tgtacaagta taatagcgat 300  
 agcagagagg aatgtgttcc tttatttata aacaataagg cgaattatag ctatgactga 360  
 acttggcgta agatctgttt tagcttgatg gctctatgca aagctcccta gtgagcaacc 420  
 gcggccttta accaatcaag aagttcgcca ttgtcaactc tactttttt 469

<210> 7080  
 <211> 482  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-D12

<400> 7080

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 tgcgtcgta cccagaagaa agtcccgac aagttgctgg atgacaccag catcacgcac 120  
 ctgttctcga ttaccaagta caccggcttg cttgccactg gcctcacagc tgatgcgagg 180  
 tccttgggtc cccaagcaag aaatgaagca gctgagttcc gtaaaaaatg gggatatgag 240  
 atgcctgtgg atgtattagc aaaatggata gcagacaaag cacaaatata cacgcagcat 300  
 gcgtacatga gaccccttgg tgttgttgcc atgggtcttg gttacgatga agagaaaaat 360  
 gctcagctct tcaagtgtga cccgcaggt cacttctttg gacacaaggc aactagtgcc 420  
 ggactgaagg agcaggaagc aataaatttt ctggagaaga aaatgaagga tagccccag 480  
 tt 482

<210> 7081  
 <211> 460  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-D3

<400> 7081

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 tgacttgatc gcggatggaa ttgaagcgtc tcttgatgtg cttggttctc ttgtgaaatc 120

tggattcctt tgccaaggca attgcaccag aattgtcaca aaagattttc attggaccgg 180  
atgcactagg tatgacacct agatcggata tgaactcctt catccagact ccttcatttg 240  
ttgottccga agcagctatg tattccgctt cacacgtaga tcccgccacg acgctctgct 300  
tgcaactgca ccaactgaca gctccaccat ttaataaaaa tatgtatccg gtttgtgact 360  
tagagtcatc cggatcagtg tcaaagcttg catcgacata aacgttcaca acgagctctt 420  
tgtttctctc atatacaaga aacatatact tagtcttttt 460

<210> 7082

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-D4

<400> 7082

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cggagggtac tggttcacta tatgagtttg tcgcggacgc tttgaagcag ccaggtttgg 120  
aattcgatct tatctgccca gctgttcccta ggtcacgtgt gctaccgcat tctccaaata 180  
caggagagcg ggcacgcacg ttgcaagatg aaggcctggg accttctgct ctccctcaaat 240  
tcaagcccaa tgagactgat tctgttgtgt tcaccggctt gcttgacaag cttctggagg 300  
ctagtgaacc atttacagct gcacccctctt gattgttggg gttcggggccc acattctccc 360  
ctcaaatctt ctgttacatt ggacttcata ctgttgtaac tcagtcacag ggatatgtca 420  
tctgcatact cgataggttg attgatagtc tgggtacatag 460

<210> 7083

<211> 133

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-D7

<400> 7083

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tcacttgatg ctcttagttc tcaagtgaag tctgagttcc taaggaaaag cagttcctga 120  
agtcgtggca ttc 133

<210> 7084  
 <211> 294  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-016-Q1-E1-E1  
  
 <400> 7084  
  
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 cgcgctcaca tgccgatctc tgaggggatg ctcaatgtga gaacctcgtc acgatgtcct 120  
 acatgcctta gcactgttcg cttactgtgc tcggagtctc atgggtcact cgcattgccta 180  
 cggcagggtta atcatttcga tccttctcct gtgtggacca tgagttcaca gactctgcac 240  
 atcgcttggt aacgtgcacc atgcaccttg tagaagtaca tctggtcaca tcag 294

<210> 7085  
 <211> 464  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-016-Q1-E1-E10  
  
 <400> 7085  
  
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 tgtaaccgcg ggtcctatca cagggcttac aattggattg tggagaatgg cggcctcacc 120  
 acggcagcgg attaccgta cacggcggtg aggggcgcct gcaaccgcgc caagtccgcc 180  
 catcacaccg tcaagatcct cggcggcggc gtgatccgc ccaggaacga gcccgaatg 240  
 cagcttgccg tctccgggca gcccatcggc gtggccatcg aggtcggcag cggcatgcag 300  
 ttctacagga gcggcgtcta ctggggccct tgccgggacaa atcttgctca cgcggttacc 360  
 atcgtcggct atggcatcga cgcgctact ggggccaaagt actggctcgt caagaactcg 420  
 tgggggcaga cgtgggggtga gagcggctac atcggcattgc gccg 464

<210> 7086  
 <211> 466  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-016-Q1-E1-E11



<400> 7086

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aggagatcgt tgacaatacg ttcagtcaag cagactcgaa tggcgatgac aggatagacc 120  
ccaaggagtg ggaggagtgc gtcaagaaga acccagcatc gctgaggaaac atgtcactgc 180  
cctatctcca ggacattaca acggcggttc cgagctttgt gatgcattcg gaagccgacg 240  
attacagcgg aatcagcaaa taataaccgg gccttagtgc cacatgatcc gctccggcta 300  
tctatgaaca tgctgctggg aggctggctg cgcgttcaat tcagaggcgc gtgagctgca 360  
accggaaagc ccggagctcg aatgggggga gaacgcaagg gagccgatcc ggtagccggt 420  
gagcgtgaga tgatgtccac cggacgatga cttcatgtcc atgcga 466

<210> 7087

<211> 496

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-016-Q1-E1-E2

<400> 7087

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cgagaagtgg accaagagta ggacaacact ctcgtactta cgtacctggg gatgcttggc 120  
gaaagttaat gtgtcgatcc gcaaaaagcg taagcatgga ccaaagactg tggactgtgt 180  
taatttgggc tatgctatga atagtgttg ctatagattt ctagtagtga aatctgaggt 240  
acctgacatg aaggctcgga caattatgga gtctaaagat gctacattct ttgaggacat 300  
tttccocatg agatatgtac aaagcacttc tagacaggaa tctgaggaga ctctgaacc 360  
tgccatttcg atggaatatt ataacaaac acatgatgaa aatcccagg aggataatga 420  
ggaattcctt ggtangggca agagacaaag gactgtaaag acctttgggtg atgatttctt 480  
catatacctc gtggag 496

<210> 7088

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-E3

<400> 7088

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cccgttgagc tagctgatgt tgtttcggct agagaaaatc gttacgcccg ctcataattc 120  
ctttttcgat gctctggaga ataataacta ctggtatatc attctatata tcaaggcccg 180  
cttgtgaaat aaatgaccc tgcgccccgg ttttgtgtcg tcgatcaaaa caaataaaaa 240  
aatgaaaaaa atgaaaaaaa aacagaaaaa aaaaaaaaaa aatgtaaaaa acaataaaaa 300  
aaaaatataa gaatcaaaaa aaaagaagaa ataaaaaaaa aagggggccc tccaaaagat 360  
tcgaatttaa gattatcggt atgagaaatt aaaatctctt aaaaggggcg cctcaatttc 420  
gttatgaggg tcatcttt 438

<210> 7089

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-E5

<400> 7089

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tcagggtcga aaatcaagga gctgcaagtt tggaacaga gttgtcgctt cgattatcgt 120  
agatctatta aacaagaagg tatcacagat agttttttta tgatagatga cgtcacgccg 180  
atttacagca atcagagaag ataacatcac ggcggttcat caaactataa gaagatgttg 240  
aagatgaagt ttttgctaag gattgacatg aacctgttca aatcaatctg gggcctaattg 300  
ttggggatat tactactggg cgtaaaccgg cctatctggg ccggattaac ttcatacagta 360  
gttaagcatg ttaaagccca tgaaggtaga tgagggtca agaccataa tcggttgaga 420  
gcctgtagcc gtaaaccggt gtcaatatat aacttgatt gtaag 465

<210> 7090

<211> 209

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-E6

<400> 7090

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 ggttcacgtg acttccatca aggaaccgcg catctattaa tctggggatt cgcacgatcc 120  
 tgtgagctct cttacacacc ggggatacca cagttcaact ctattgtgct aaatgaattc 180  
 catccctatg atcacaatga gaaatcctt 209

<210> 7091  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-F10  
 <400> 7091

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 gctgcagcct ggcagttcta tgctgtatgc tacctttaga actagagtaa aatgtaagaa 120  
 gtgaaagaac ttgcgaggct atgattctgt gccatagcct gagggggggt ctggagggtga 180  
 aagaacatcg gagtactgtt gatgtcgtga ctgaactatc atccattgcc taatagatca 240  
 tgccttgttg tgttcccaat gatttgcaat agaagaaaca atttcagatg aaagtaaaat 300  
 ccggcgctct aaaagattca aacctaattg agcctggcag ggacattaaa agtcctcgag 360  
 aatgacaacc aaattcaact tcatgggcct cgcttttgca cgtcataaat gggaaaaacc 420  
 cgggggtaac caa 433

<210> 7092  
 <211> 474  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-016-Q1-E1-F11  
 <400> 7092

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 aactatcaag ctcaaaagat ataagtgaag cacatagagt attctagcaa attctaata 120  
 agtgggattc tctcaaaagg tgtgtacagc aaggatgact gtggtaaact aaaaagcaaa 180  
 gactaatata atacacgacg ctccaagaaa aacacatatc atgtggcgaa taaaaatata 240

gctccaagta aagttaccaa tgaacaaaga cgaaagaggg gatgccttcc cagggcatcc 300  
ccaagcttag gcttttggct attattgaat atcttggggt gccttgggca tccccaaagct 360  
taggctcttg ccactcctta ttccattgtc catcaaactt ttacccaaaa ctagaaaact 420  
tcacaacaca naactcaaca ggaaatctca taagctccgt tagtgaaaga aaac 474

<210> 7093  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-F12  
<400> 7093

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ggcagtgcgg cgtcgagatt ctgctacatc aaggccaccc ccgccaacaa gaaagccata 180  
cagcaaaact tggattgctt caagagctgt tgcgcgcaga agaagagtga agactgccgt 240  
aatgaatgca tcctcaacaa gagtagtccg gccgcttgaa aaatgaaaat gcatgcattc 300  
cttccttctt tccttgtact tgggggtggt tccttcattt cagagtgcct cattcatgca 360  
tgttttcaca tgcgcatgta ttcattctcat ttttttttgt tgaacattta ttttgccttt 420  
ttttttgttg cgaaaataaa attcattttg ttgttgac 458

<210> 7094  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-F2  
<400> 7094

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gcgaggcgag gcgaggcgca gcggaggag aggccatgga tcccgaattcg gtctcgaagg 120  
cgttcgtgca gcactactac cagacgttcg actccaaccg cgccgcgctg gtggggctgt 180  
accagaacgg ctccatgctc accttcgagg gcgagaagtt cggcgggccc gccgccatcg 240  
ccggcaagct cggatctctc cccttcagc attgccagca caagatcgac accgtcgact 300

gccagccctc ggggccccag gggggctcc tcgtcttcgt ctccggcacc atcatcacgc 360  
 gccccggcga gcacccctc aagttctcac agatgttcca tttgctgcc tctggaggga 420  
 gcttctacgt gcagaatgac atg 443

<210> 7095  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-F3  
 <400> 7095

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 aaggcgctcg tcggcgctt cgagaccgctc atggacgaca accaaagccc cgccaccgcc 180  
 cgcaagccgc ggtcaacct ccacgcctga actacgagta cattccacca gcatgaagct 240  
 cgatcgctg cgcctcctcc tttatcccg ctactcttta atcaccatc aaccaattt 300  
 gtcgtcgtcg cacacttata tataattacg gtatcgctta tattttgcaa ggaggaagat 360  
 gatggagggg ttatcatgat gtaataataa taatgatcat ggaggaagat ggtgtatttc 420  
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<210> 7096  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-F4  
 <400> 7096

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 caggctctgcc ggtggccacg acgatgagga acggcaacag cgatgactat attttctcgg 120  
 tccgctcggc tggaccggtt aaagaccgga ccagaccgag aacttttcgg gcctaatatg 180  
 gcagaccgga ccgtccattt tatgtagcga gctaggaccg agcgagccaa gaccgaacgg 240  
 gccacgagcg ggccgaaaag cccgcttggt acgtccagcc tgacggacga cgatccaact 300  
 gacttggttc ctgccccaa gggctagatg tgcacgtaca aagctagcac cagtctccga 360

togatccctt tgtcagagac atatactagt actaactagt agagtgtccg tgcgttacaa 420  
aatcacgga agaagaaag 439

<210> 7097  
<211> 459  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-F6

<400> 7097

tccgtacatt cccggggcgc cggggagggtt gagaagctga ttggcaggat agtgaagtgg 60  
ctgaagcccg gtgggcatat ttcatcagg gaatcgtgct tccaccagtc tggggattcc 120  
aagaggaaag tgaacccgac gcactaccgg gagccgaggt tctacaccaa ggtgtttaag 180  
gaatgccact cctatgacca agaggggaat tcctttgagc tttctctggt aacttccaag 240  
tgcattggag cttatgtgaa aagcaagaag aaccagaacc agatatgttg gctgtgggag 300  
aaggtcaagt gcacagaaga caaaggcttt cagagattcc tggacaatgt gcagtacaaa 360  
tccactggaa tcttgcgta tgagcgcgtg tttggggagg gttatgttag caccggtgga 420  
ttcgagacca caaaggagtt tgtggacaag ctggacctg 459

<210> 7098  
<211> 467  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-F8

<400> 7098

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atggcacacg ctgactcccc gaagcatccg ctcaactccg tcaaacatcc tgattttgat 120  
gtcacctact ccagcgacac gataaccggt gtcacgccc ctgttcaaga attcatccaa 180  
ttaaccagtt aacttgccga ctaatcccta ctcatagggt caccgagccg ccgataaacc 240  
gaaaaatcgt ctgattaatt gattaaatgg ccgattaact tgccgattag ccgattaatc 300  
ccctactcgc tagccaaccg agcagctacc agttaacgat ttcctcaaca atgggtcatcg 360  
cccacatagg ctaaaccaaa ctcaccagac ttgtacgaag agaaccactc cctggtgggc 420

gtcgcgatgaa aagagcaagc taaatccaac atccatgctt cagtttt 467

<210> 7099  
 <211> 275  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-F9  
 <400> 7099

cggcagcagc agcagcgaca gcgacagcga ctgagccagc tccggccgcg ctccggcagc 60  
 agcgtgcagt gtacgcgaga tcgatgaccg cttgggagaa gtgtggcata catatatgtt 120  
 gcaggggtttg gagcgtgtgg taccatatgt atgtaatgcg tgacatgtct cacggatctt 180  
 gtgatgtata ataattagcc ggctgcactg cactgcacgg tgcttgtcat actaacgtta 240  
 atgaatcatg ttggtattga tgcattctccg tttgg 275

<210> 7100  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-G1  
 <400> 7100

ggggacctgg agatacaaca tttggagttg tatggtttgc aggagcaagg tgctgcagtt 60  
 agggagcttg agaaccaact gaagataaac aatgtcgagt cacagctata ctcccttgaag 120  
 atcgaatcct tgcaatctga aaatcagagg ttacaaacac agttgtctga aagctcaaag 180  
 ttaacttccc agcttgagtt gacaaaatca aaatgcaagc tgttgaaaaa gaagttgaga 240  
 ctggatgcgg aacaagcaaa ggagaaaatc acttcccttc agaacatagt tgattccttt 300  
 cagtgtaagg agattattga gggagaagtt gacggcgagg ctgagaagaa attaaagagg 360  
 ctagaggaat tggaaaatga ggcaagagag cttagagctg caaattcaag gctgcagcag 420  
 gagaattcac accttactag gcgattggag ctcacacgcc ta 462

<210> 7101  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-G10

<400> 7101

ggggatcagt ttaatgcttg ataattgttt tgagatatgg aggtagtaat gttagagtca 60  
tgcaaattggg taattatgaa attgagaaat acgtgtgctg aacttggcaa gtcccgtagc 120  
atgcatggat ggtagaagtt gtgtgacaga tttgttgcac gaggtgctct tttgattgcc 180  
ttccttatga gtggaggctg ggatcgcgcg atgggttaact cctaccatcc ctccggctac 240  
gagcatgcgt agtaggactt tgcctcgaag gcaggtagac ttttgcaata agtatatgag 300  
ttccttatga ctaatgtgag tccatggata tacgcacact cagccttcca cattgctaac 360  
cacgacatta ccacgcaact ttgcgcggta tcatgcaccc cttagttacc ttcctcaaaa 420  
tagccaccat acctacctag tatggcattt ccacagccat tccgagat 468

<210> 7102

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-G11

<400> 7102

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ataagatttg tagatcactg aatatgatat gtttgattcc ttgcaatagt tttgcgatat 120  
agagatgata atatgtggga gggtctagta gatggttgtg tttagtaaga atattggtgt 180  
taaggtttgt gattcccgaa gcatgcacgt atgggtctcct aactatgtaa ccaaattggc 240  
gcacattgta ttttgattgt ttatctttac gtgaaggctg ggcgcacgcg atggttagct 300  
cctaccaacc tcccccttag gagcatgcgt agtagtactt tgcttcgagg gctaataaac 360  
ttttgcaata agtatatgag ttctttatga ctaatgtgag tccatggatt atacgcactc 420  
ttacccttcc atcattgcta gcctcttccg taccg 455

<210> 7103

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-G12



<400> 7103

gggtacatga ttcacaaggg ggcgacggtg aacttcatgg tggccgagat gagcagggac 60

gagcgggagt gggagaagcc aacggagttc gtgccggaac ggttcctgcc aggcggcgcg 120

ggcgaggctg tggatgtgac cggcaaccgg gagatcaaga tgatgccgtt cggcgtgggc 180

cggaggatct gcgccgggct gggcatcgcc atgctccacc tggagtactt cgtggccaac 240

atggtgaggg agttcgagtg gcaggaggtc accggcgagg aggtggactt cgccgagaag 300

aacgagttca ccgtcgtcat gaagaagccg ctgcgccac gcctcgtgcc ccgaagggcc 360

tgagacaaag tccatctcca tcagccagta gtcaaaccg accaatagtc cactcctatc 420

gcttcggtcg ttcttgttta gttactctat ggttgataat ggttaattcg t 471

<210> 7104

<211> 460

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-016-Q1-E1-G2

<400> 7104

ggggtcatat ttcagggccc aatgcatggt agtagctgtt catggatcac aaacatagaa 60

ctcagttcct gaggacgtct tcaatgagac aaccaaccat gtactcctac gtggcttctc 120

accgctacct ttaccaaate gtattcacac acttagctct caacagtagg acatgttcac 180

caatttccaa ttcatccccg atgaatcaga cctgactcaa ctctaagcgg tagcaggcac 240

gacgaaaaaa gcatgaatga gtaggcacat cagggtcaa acaactccta ctcatgctaa 300

tgtgtttcat ctatttactg tggcaatgac aggtcatgca gaggaaaagg ggttcaacta 360

ccgcagcatg taacacttga attgttggtg tcctaatagca gtanaagaga gcaagagcga 420

gagaatggga ttgtatcgga atgaacaagg ggttttgctt 460

<210> 7105

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-G3

<400> 7105

gggggccaca cacagttttg aatcgattta tcttttttgc tgagagctgc tcagatgtcc 60  
aaataagttg aaatttttaag cgaacctcat gcatcaaatt gccaatcaca caaaaaatta 120  
gattttttta aattttttta gtatttattt tgattttttt tgaccgggtg catgagtctg 180  
ggcaccgaat tgggttttcg tttgtaaacc ccatttactg gtacaagagg ttatcagaag 240  
tctaaaacta aatgtaatgt agatctctag agatgtaatt tgcattgcat ttatagcaca 300  
ggaagtagta tcctggaaca tttggtgaca tcaataaaaa agaaagagaa gttc 354

<210> 7106  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-G6  
<400> 7106

cccggggccc cgggcaagat caagacctac ctggcgcgcc catggaagga gtactccagg 60  
accatctaca tccagaacga gatcgggccc ttcacgacc ccaagggctg gctcgagtgg 120  
aacggcgact tcgccctcga gacctcttc tacgccgagg tggagaacac cggggccggc 180  
gccgacatga gccagcgcgcc caagtggggc ggcacaaaga ctgtcaccta cgccgacgcg 240  
cagaaggagt acaccgtcga agccttcac cagggcgagt agttcatccc caagtaaggc 300  
gtgcccttca tcccggggct cctcccgag tcagaggcgg ggaggggatca ttaactcatc 360  
actccatccc tcacatggt tcattattcc gctgctccat tgctgctt 408

<210> 7107  
<211> 474  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-016-Q1-E1-G7  
<400> 7107

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atcggttagt atcggttgag cctaagtttt tgcttcttca catgatgagt gctatccttg 120  
aaatgtactt ttattttggt ttgcttggtg tttgaataat atcccaagat ctaaaattct 180  
taaagtgtac agagtcttca catagttaca taattattcg actactcatt gatcttca 240

tatatctttt gtagtagttt gtcatttgct ctagtgttc acttatatct tcctagagca 300  
 tggcggtagt tttattttgt agaaattatt gatctctcat gctccactta tattattttg 360  
 agagtcctaa acagcatggt aattttcttt agttatgaaa ctagtcctaa tatgatagac 420  
 atccaagatg gttataataa aaactttcat atagagtgc ttaaatacta tgat 474

<210> 7108  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-G8  
 <400> 7108

ggggaagcgg tcgatcgatg ctgagacgcc gggcgggcgg gagtcggcac gcagcaacga 60  
 ggcggtcgag gaggcgcgga tcaagctgct ggagctgcgg caggtgaaca aggtgaaggc 120  
 gctcgtcggc gccttcgaga ccgtcatgga cgacaaccaa agccccgcca ccgccccgaa 180  
 gccgcggctc aacctccacg cctgaactac gagtacattc caccagcatg aagctcgatc 240  
 gcgtgcgcct cctcctttat cccggctact ctttaatcac ccatcaaccc aatttgctgt 300  
 cgtcgcacac ttatctataa ttacgggtatc gcttatattt tgcaaggagg aagatgatgg 360  
 acgggttatac atgatgtaat aataataatg atcatggagg aagatggtgt agttcacttt 420  
 atatacgatc atcgacacga 440

<210> 7109  
 <211> 303  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-016-Q1-E1-G9  
 <400> 7109

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 ggacgcatga tgcgacgagg caggaggaca tgtactcgtc gtggatgaac gacggtggca 120  
 gcgacatgct ggcggcgcgg tggtcggacc tggagcagat ggtcgcctag ttaattaatt 180  
 cacattttcg tttcagactc cagtatataa ggagaaaaag aaatatgtaa tcgttctttg 240  
 ttttttttca aacttgttgt gtcgaacac tgataaaaag aaaatttcac gcccaaaaca 300

aaa

303

<210> 7110  
<211> 475  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-016-Q1-E1-H1  
  
<400> 7110

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agataatgca agcagatgag gatgttgga aaattgcact ggctgtgcct gttttagttt 120  
cgagagccct tgaattgttt ctgcaagatt tgatcgacca ctcatacaaa attactcttc 180  
aaagtgggtgc aaagacactg aattccttcc acctaaagca atgtgtgaag aggtacagct 240  
cttttgactt cctaactgag attgtcaaca aggtgccaga tctcggtggc ggtgaatctt 300  
gtggagatga aagaggatta cccagaagaa ggaaattttc aaatggaagc gaccagaga 360  
atgaggagcc ccgatctagc aaaatgccca taagaagctt gaacaccagt cccagaggac 420  
gaggcagagg tcgaggaaga aggcgagggc ggcctccaac caagagaaag gaaat 475

<210> 7111  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-016-Q1-E1-H12  
  
<400> 7111

ggggaatttt gtttgcagtt attttgattt gatttgcata aagcatggga ctgggcatcc 60  
tggtgacgag ccatttctga gtgaggagcg gagtccactc ctcttgagaa taaccgcct 120  
aacatggaag atacgaacag ccctagttga tacatgagct atttgggcat acaaacaga 180  
atgtttatth aaaggttttag agtttggcac atacaaattt acttggaaag gcaggtagat 240  
accgtatata ggtaggtatg gtggactcat atggaacaac tttgggggtt atggaattcg 300  
atgcacaagt agtattccag cttagtacaa gtgaacgcta gcaaaagact gggaagcgac 360  
cagctagaga gcgacaacag taatgaacat gcattaaaat taatcaacac cgaatgcaag 420  
catgagtacg atataatgcg ccatgaacgc aaatatcg 458

<210> 7112  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LFB104-016-Q1-E1-H3

<400> 7112

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 acagtcttca gaggtcctgt gaatgatcat gcattgcaaa atgtcatttc cgagaatctc 120  
 cggttcccggt ccttcccggt tgtcatcaac catgcctagg atctcatcag aggattgcta 180  
 gtcaaggacc tgggtcaacag gctgggaaca ttgagaggag ccaccgcat catccatcac 240  
 cttttctttg aacgggtgaa ctggtccttg atacgatctg ctgccccaac atagacaccg 300  
 tcgtgccatg tcttgactct tgcgacggtc cgccatacta cagaaagcaa atgtctggac 360  
 ttcgatgatct ccgagtagca gtactttgaa cttttctaga taagtcttta gtacatttag 420  
 cacaatttca gctgatagtc tacaattttt ctgttgac 458

<210> 7113  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-H4

<400> 7113

ggaaagtacc cacacctacg gcggctactc caacatggtg gtggtgcacg agcgcttcgt 60  
 ggtccgggtc ccggacgcca tgccgctgga caagggcgcg cccctgctgt gcgcgggcat 120  
 caccgtgtac acccccatga aataccatgg gctgaacgct cccgggatgc acctcggcgt 180  
 actgggcctg agcgggctca gtcacgtcgc cctcaagttc ggtaaggcct tccggatgaa 240  
 ggtgacggtg atcagctcat cgccggggaa gaagcaggag gccctcgaca ggctaagcgc 300  
 cgacggcttc gttgtcagca agaacgccga cgagatgaag gctgcatga gcaccatgga 360  
 tggcatcata aacacggtgt ctgcaaakat ccccatgggc cctctcgtcg ggctactcaa 420  
 gctcaaaggc aagatggtca agg 443

<210> 7114  
 <211> 120  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-H5

<400> 7114

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 cttggttttcg ctgtggtgcc tcttgctggg gttgggttcg ggacgccgtt ggggtctctgc 120

<210> 7115  
 <211> 309  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-H6

<400> 7115

aggagacccc cgccgcgtcg gtacatgaga gaaggcactg gcgcagtcac ggcttagata 60  
 tgaaagtttt ggacaccgag cggaactcag tcgagagctt atatatgaaa actagtgaga 120  
 gagagaagac tatatattatg caattagaag agaactatat acattgtttt tccctaagct 180  
 caataaggtc tgtgtccttt gtggactcgc tttcttcttt gtagagacag aatatataag 240  
 accgaggatt gcattcaaatt ggaaattaaa ttcaagttta gaaaagaaca ttagaactgg 300  
 caatgctaa 309

<210> 7116  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-016-Q1-E1-H7

<400> 7116

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 gaacgatgac ccgtacggtt acagtagccg gaagagaaaag atggatcggg aagcaaatgt 120  
 tgtggcgcggt ttggcatcgg aaatggatgt gatgaacaaa accgtgagtg tactactagc 180  
 cgaaagacat gcagctcggg cgcaacatga agatcatcca gcggatctca taagccagca 240  
 gcggataagc aatgtggctt ccaactgagge cccatcggct ggtgcagatg caccgacgat 300

cgaaattact gcaccggaac ctctggtggt cgaaattact gcacctgagc ctctggtgga 360  
 caacattact gcaccggagc ctctcgcta ccccgaggac gatataaacg agatgataga 420  
 gtgtcatctg tattatccta gcggga 446

<210> 7117  
 <211> 464  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-A10  
 <400> 7117

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 cgcggcctcg gtgtacgaat ggggtggcag atgggatggc agtagggaac catggcttag 120  
 agacgcgctt gtccgaaatg tggggtaagt tacggaagta cccccactga tttgaggtgg 180  
 ttctttcggg tcaggggtac cacgggcatt tcgtgtgtcg ggatttcaca ggaggtggga 240  
 gtttccgcac gcgttgtaat ttcggaatag caaggcgcgg gttgagatgg agggagttgt 300  
 cggagcacac agagacaaag atatatctta aatatttcgg gctaacaagg cgcggttga 360  
 agacgcggga gtttcacatc acgatagaca gagacgtag cttgaatttt cggcataaca 420  
 aggcgcagct tgaaatttcg gaagaacaag cttaacgtgt accc 464

<210> 7118  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-A11  
 <400> 7118

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 tagagggcct atcggcagtt ggacagtgtt acaataatag cacctacatc cggaagggtt 120  
 gccagtttct attatcaaag cagctaagga atggtggatg gggtagagat catctttcat 180  
 ccacaaccaa ggcatacacg aacctagacg gggagaaatc acatgtagtc aacaccgcac 240  
 gggcaatgtt ggcactaatg aaagctggac aggccgaacg aaatccgtct cctttgcacg 300  
 aagctgcaag acttatcatg agcatgcaac ttggcaatgg tgacttccca caggaggaaa 360

tgattggaag tttcttgaaa a

381

<210> 7119  
<211> 478  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-A12  
  
<400> 7119

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gaaggtggag ccagaggcgc tggagttcac gtcggcgatg gagaagaaga cattcacggt 120  
gaccgtgagc agcaggggag gcgacgccga cgccgggcag ctggcagagg ggagcctacg 180  
ctgggtgtct gaagatcacg tgggtgaggag cccgatcatc gcggacgcca gggttgtccc 240  
gacatgattc tgtcaggcgt tcgttgtact cagccagcct ggtagcata agcacaagta 300  
tccatacagt tcacaacatg gagacattat cgttcttccc aactagcact actccttgag 360  
gtcccgattg caaacatgca atcacacaaa tagggcactt atcaaaggag gtcaactgaga 420  
taaccttgta tctttactgt atcaaatact actactcaaa atcctcaagt tgcccagt 478

<210> 7120  
<211> 343  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-A2  
  
<400> 7120

ttaacccaac cctcccccaa accgaaccca accggaagga atccccccgc ccctgaacgg 60  
tatttccaat tataagggcc taattgcctt cttccctggg aaatttgatt tcttccagat 120  
ccgagactga agtttcgtga ttttgaatta tactcagtga ttgtaataat cgggatactg 180  
aggatgttta ccaactgctca agaaatataa aaaaggatga cacatattct tggttctgaa 240  
tttttgaaca tgcctgagca ttcataagat gcaggaaccc tatttggggt ggctttggct 300  
tatgtcagct attgaactta ctagcttata aaccagatca tgc 343

<210> 7121  
<211> 391



<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-A3  
  
 <400> 7121  
  
 cccgggtcga cggggcggct gaactagcgg gagtaactga agtggctgaa gcccggtggg 60  
 catatatttca tcacggaatc ctgcttcac cagtctgggg attccaagac gaaagtgaac 120  
 ccgacgcact accgggagcc gacgttctac accaaggtgt ttaaggaatg ccaactcctat 180  
 gaccacgaag ggaattcctt tgagctttct ctggtaactt ccaagtgcac tggagcttat 240  
 gtgaaaagca agaagaacca gaaccagata tgttggtgt gggagaaagt caagtgcaca 300  
 gaagacaaag gctttcagag attcctggac aatgtgcagt acaaatccac tggaatcttg 360  
 cgttatgagc gcgtgtttgg ggaaggttat g 391

<210> 7122  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-A4  
  
 <400> 7122  
  
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 gctcccaaaa aaccttatta cccttctccc gtacaggact caaagcgggtg tggtttcgga 120  
 ggctactat cctgactcgt ggtgcatgct gcaagccggg atgangaaga caacagtagc 180  
 tcagagaatg gaaccggtgg cgagaggaag gagaagttct ggtgcatctc tctgggagga 240  
 ccgacctcnc ttttataggc gcaagagaag gaggcgagaa gctgcgccgg gagctgagct 300  
 gaagggatcg agggagacga aacgaagagg cagcagccga aggtgctgc gtctgtattc 360  
 aatatccact acagcaaaaa ctttctagct cccgagtggc ctttcgtata cccgtagtgc 420  
 atggcaaaaa 430

<210> 7123  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-A5

<400> 7123

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gcggacggag caggggtggg tttcgcggct ggagcggaga ggttatggca gcctgggatt 180  
tcgaatggcg aaaaggaggc gatgggaggg gtcaaccatg acttagggac acgcttgtcc 240  
aaaatgtagg gtgtgttaca aaagtacccc caccaatttg aactagcggc cttttcggct 300  
cagggttaga agtgggattt cgtgtgtcgg gatgtggcag ctggagggag ttttcgcgca 360  
cattgtaatt tcaggat 377

<210> 7124

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-B1

<400> 7124

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cgagggacat tgggtcccgt ttgtcccacc aaccgggacc aataggtcca gacgaaccgg 120  
gaccaatggc ccacgtggcc cggccggccc ctggggctca cgaaccgggt ccaatgcccc 180  
cattgggtccc ggttctggat tgaaccggga ctaatgggct ggatcggcct ggaccattgg 240  
ccccctttct actagtgtta tagaatgctt catgtgcttc acttatatca tttgaagttt 300  
ggatttcttg tttctcttca catagaaaac tgatgttcgt agaatgctct tttgcttcac 360  
ttatatttgt tagagcatgg tctttttag aaagaattaa aatctc 406

<210> 7125

<211> 349

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-B10

<400> 7125

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atgctaattg catcattgcc tgctactcat atatagtcac ccttgcttta gacaccttgc 120  
 gtgatatcca tctatcaact gtacattaat atacagctca tagagcttcc cctacatott 180  
 cgaggcgtaa cacatatgct catactgogg cacttccaca tttttatcgt catagtttgt 240  
 gcgctagttc atcccttata tatttttaaag cattgatgtc gatcgactat tgattgactg 300  
 atgatgtctc acgcttcact tagattatth tgagactcct gcacaacat 349

<210> 7126  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-B11  
 <400> 7126

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 ggacaaggcc cccttccacg gcatgacctc ctgcggcaac atccccatct tcaaggacgg 120  
 ccgcggtctg ggctcctgct tcgagctcaa gtgcaccaag ccagaggcct gctccggcaa 180  
 gccaccatc gtcaccatca ccgacaagaa cgaggagccc atcgccccct accacttcga 240  
 cctctccggc cagccttcg gctccatggc caagaagggc gaggagcaga agctgcgcga 300  
 cgccggcgag gtggagatca tgttccggcg cgtcaagtgc aagtaccgcg cgggcaccaa 360  
 ggtgaacttc cacgtggaga agtcctccaa cgaaaactac ctggcgctgg tgatcaaatt 420  
 cctccaaggc gacggcgacg tgggtggcggt ggacatc 457

<210> 7127  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-B3  
 <400> 7127

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 gagattatgc aactcccgat taccggagga acacattgtg tgctaccaa cgtcacaacg 120  
 taactgggtg attataaatg tgctctacaa gtgtctccga tggctacttt tgagttggca 180  
 tagatcgaga ttaggatttt tcaactccgat tgtcggagag gtatctttgg gccctctcgg 240

taattcacat cactataagc cttgcaagca atgcaactaa agagttagtt gcgggatagt 300  
gcattacaaa acgagtaaag aaacatgccg gtaacgagat tgaattggta ttgagacacc 360  
gacgatcgaa tctcgggcaa gtaacatact gatgac 396

<210> 7128  
<211> 431  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-017-Q1-E1-B4  
  
<400> 7128

cggtgcgacg ggttgctgta gattaccttg attaggttgc tgattgaaac cgccttgatt 60  
gccttgggccc tgaaatccag agtttgaacc gccacctcca aagtcggggcc cgtgagagcg 120  
gatcctgacc cgccatgcgg tccgtgattg tcttgataaa aaccggaatt tctgtattcc 180  
ctcatgatga agcaatcttc ccatagatga gtggccgggt tatcttgaga accgtgcttt 240  
gggcaaggct ggttcattat cgcctcaagg ttgaacttgg gcccgcctaaa ccggggcatt 300  
gacgatttcc ccttacgacg ctgattatta ttctgcgtgt tggatttggc cacaaagtcc 360  
gaatcgccgt cggttgcctt gcgcttaaca ttattacctt gacnccgctt attgtgccgc 420  
tgccccctttg c 431

<210> 7129  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-B7  
  
<400> 7129

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cagcgggggcc ctcaccaggc ctccacttcg ccggaccacc gtatcctgcc gggcaaaggg 120  
tagccccggc gtggcgctact gcacgctacc ggttctgcag ctactctatt atgtcagaac 180  
acttgagagg gatgaaagtg aaacagcagc accagcagca gcgaagatac tgctgctccc 240  
tctcactcg taccctgctc ccgctgggtc tactcctcac cggagccaac cgcaaacagg 300  
gcagattgtg atcatttctg aactagcaag atacagcaca gcgcagcatt ctgtctatat 360

atccctccct gcttccctgt ctgaactttt gtttgaaaca gagttcctga acttcctaata 420  
taacatg 427

<210> 7130  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-C1  
  
<400> 7130

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tctaattgaa attcatatta agcacataat atatttcatt tccatattaa ggaagcagaa 120  
tttcataatt gaaatacatc agagtacaac atgatatagc ttcagcactc agctacccca 180  
ttacacaact gcaccagcat caagtttcac atgcaacatg tagaaccttt caaaattagc 240  
atcatagaca gtatatagac agatgcatct catctggaaa agtgctgaag cggaaggcga 300  
atattgagcc ttcattcatg ttgaaggctt ttgcaacttt aggccagtgc ctgtggatga 360  
ttgaccgtcc gtcctgcatc ctcttcagga acacttcaat attgaaccgt ggggtgttgta 420  
tgaaa 425

<210> 7131  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-017-Q1-E1-C11  
  
<400> 7131

ggagcggaag caagcctaca tagcggagct cgagtcgctg gtcacccagc tcgaagagga 60  
gaacgcccac ctgtccaaag aacaggagga ggcaaaccag agacggctga aagagctcaa 120  
ggaaaaattg actccagtca ttattgcaaa aacgccgtca caagatctta gaagaacaaa 180  
ctcaatggag tggtagacat gagccaagct cagtagccat ccccttacag ctatgtagat 240  
tttgatttgt ttgtctgtca ttcctctgtt tattggagtt aactcagttg ttgtaactta 300  
gtagatatag cataaacagc ttaaattggaa tcataatgtg tagagcggaa ggctgcgttt 360  
gagcaaaatg gaatctcatc agcagcttat attctgtctg atttgccctt c 411

<210> 7132  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-C8  
  
 <400> 7132

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 attgttattt ccttccttta atagtattgt aagggaagca ggttctccaa ataaatgcgg 120  
 aagattgcag catcaagggt atcacttcac tggatttttc tacttcttgg tgggcagcta 180  
 aattagtttc cctgggtccgt ttctcaacta tcacagaaga actctttact ctgtaatttt 240  
 ctctttattt gtgctgaagg catagatcaa gtgctacatg gctatgctct tcggagctta 300  
 gagcatcagt ggttggcctc ctttctattt gttctttttt ctaggatttg cgtgtgttaa 360  
 tcggatgaat atatggaagg atacagagag gccagagagt ttgctatcaa attctcaagc 420  
 agcaagaaga tagctagcct aaatg 445

<210> 7133  
 <211> 276  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-D11  
  
 <400> 7133

ggatcgtctg cgacagcgga gatggcgctc tcgtggagct tgtgaatggg attctgcaaa 60  
 gatcagactg ggaggaagca ataaaaatgc caattggggg agttccagct ggcacaggaa 120  
 acggcatggc caaatcgctt ctgcatgctg ccagcgagac gtgctcagtt tcagacgccg 180  
 tatttgccat tatcagaggt catagtatgc tttcaggcac ataataaag tttccacggc 240  
 agtttcaa at agagaaatct gatggaaaca acaact 276

<210> 7134  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations

<223> Clone ID: LIB104-017-Q1-E1-D3

<400> 7134

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gccanaaatc aggtcgccgc gagcttcgcc gcggagggcg ctgtcatgaa cgagctgaag 120  
cagtggaacg acctctacgg cgaaggangg tcgaggaaga aggagcagct gacctacttt 180  
ttgtagaacc ggaaggatgg tggatgtgtc gtgttgggca aatcgctgaa gccttggcag 240  
agcatgagca tacatatgtt ggtgggaaaa ggatagagga tttcctgtga gcaaccgtga 300  
gttaggatct tggagtgaat ggactccttg agatgtgtgg cagggggcat tggatcatgt 360  
acgattcttt tatacgaaca agtattgtag ttat 394

<210> 7135

<211> 382

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-017-Q1-E1-D4

<400> 7135

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acccgaagct gcgcatgtcg cacggggcgga tgggtttcga ggtgcggccc accatcaagt 120  
gggacaaggg caacgccttc gagttcctgc tcgagtcgct gggcttcgcc gactgccccca 180  
acgtgctgcc cgtctacatc ggcgacgacc gcaccgacga ggacgccttc aaggtgctgc 240  
gccggagggg ccatggcgtc gggatcctcg tctccaagca cccaaggac accagcgctt 300  
ccttctcgct gcangagccg gccgaggtca tggagttcct gctccgcctc gtcgagtgga 360  
agcagctctc caaggcgcgc ct 382

<210> 7136

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-E10

<400> 7136

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tccctccttc cccggtgagt ttcttggag taggggagat acccctttgc gaccaatggc 120  
 aggatcttcc atcagcacca ctctggctc ccaattcctc ccatcttggc gcccgcatcg 180  
 ctgtccatgg cgcacccctt tgggtgctc cagagtggtc gccggtgctg gcaacttgctg 240  
 tcgttgata caacatgctc ttctttgaca accatggctg acggcgacga ggtgccttgt 300  
 tccgtgcggt tcgttggtca tcggagtcac ctcggttttt ttgcagtaca gagaagctac 360  
 ggtgcagtcc cttaacctga gcatgatact cacctcccc tgacattgca gttcgctgta 420  
 gtactccggt aatgccatgg cgctggagtt cacagtg 457

<210> 7137  
 <211> 468  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-E11  
 <400> 7137

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 tgaacccgaa ttatacggag tttaggtttc cgcagataaa agctcatcct tggcacaagg 120  
 tttccacaa gaaaatgcct cctgaagcca tagatcttgc ttcacgtctt cttcaatatt 180  
 caccaagcct ccgttgcaact gctcttgacg catgtgcgca tcctttcttt gatgagctac 240  
 gggagcctaa tgcgcgctg ccaaacggac gcccgttccc acctctgttc aacttcaagc 300  
 atgaactggc caatgcttca caagacctca tcaacaggct tgtgcctgaa catgttcgcc 360  
 gacaagctgg tcttgctttc gtgcatgcgg ggagctaaat atgcgcaccg gtgccctcaa 420  
 ccttgcacct tattgttttg ccatgggcag aagggtggtg gtttaaga 468

<210> 7138  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-E2  
 <400> 7138

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 ttttcaatct tcacgcaata cataagcgtg agccatggat atagcactaa ggtggaataa 120



aatatggtgg gtgtgaagaa cacaccaagg gtgacgatat tctcatatca actatgcgta 180  
tcaatgggct atgaagatgc acatcaatac atatcactgt gagtgattag ggattgccat 240  
gcaacggatg cactagagct ataagtgtat gaaagctcaa attgaaacta agtaggtgtg 300  
catccaaact gcttgcccac gatgatctat ggcaatttga agaagcccat cattggcata 360  
tacaagccat gttctataat gaaaaaaatc cactagtata tgaaagtgaa aacat 415

<210> 7139  
<211> 369  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-E6

<400> 7139

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ttcgccagct accggaaccc gctggggatc tgcggcaact acacgggtggg caaatgccac 120  
acgccaagg ccaaggatat tgtgacgaaa gatttcgtgg ggaacaggag ctgctgtctg 180  
gccgtgtcgc acgacgtgta ctctggagaa ttcaactgta cgtgcaccac ggtcacacat 240  
cacatccatg caatagtgat caactaggca taggaacgtg gacctcacat gtaaaactatc 300  
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ctatcaggc 369

<210> 7140  
<211> 416  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-E7

<400> 7140

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tttcataatt gaaatacatc agagtacaac atgatatagc ttcagcactc agctacccca 180  
ttacacaact gcaccagcat caagtttcac atgcaacatg tagaaccttt caaaattagc 240  
atcatagaca gtatatagac agatgcatct catctggaaa agtgctgaag cggaaggcga 300

atattgagcc ttcattcatg ttgaaggtct ttgcaacttt aggccagtgc ctgtggatga 360  
 ttgaccgtcc gtcctgcac ctcttcagga acacttcaat attgaaccgt ggggtgt 416

<210> 7141  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-E9  
 <400> 7141

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 aaggtggtcg tggtagacta tgtgtattca ttcttgagga ggaacttggc agaggggtcac 120  
 aaggtgttgt ccattcctaa agatgagctg ctcaaagttg ggatcacata tgagatatag 180  
 agatgttttt tttttgtttt tttttttttt tgaaacggaa cacagattgc attcctccta 240  
 catatcattg ctggggcaa at cccagctac aaggttctga acaaactctg ggaattgtcc 300  
 caaccaagta atacatgcac cagagttaa tgttgctccg aaaaaataaa atccatttaa 360  
 aacaaaaaaaa aagcggccgc tct 383

<210> 7142  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-F10  
 <400> 7142

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 atccaatgcc tcttgggaga aacaagcacc acgaagaatt gtccggcgac gcctgtggtt 180  
 catggaactc tccacctcgg aattgggtggc agacagcccg tccgcatcct ctgtcagagg 240  
 agcgtccggg gcatgcctcg tgttcgtctc cgcttctgga cccggccttg gagcctggct 300  
 ggtggaggcg cggttggcaa cctctccgga tgtagtccgg cgagcgctct ttttcctaaa 360  
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 tactgttgtg tccgcatctc aatccggacc gcac 454

<210> 7143  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-F11  
  
 <400> 7143

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 ttatcatgtt tgatgtcact tcaaggctga cctacaagaa tgttcctacg tggcacaggg 120  
 acttgtgcag ggtttgtgag aacatcccca ttgtgctgtg tggcaacaag gttgatgtga 180  
 agaacaggca ggttaaggcc aagcagggtga cattccacag gaagaagaac ctccagtact 240  
 atgaaatctc tgccaagagc aactacaact ttgagaagcc cttcctttac cttgctagga 300  
 agctggctgg tgatcccaac atccacttcg tcgaagcagt ggccttaag cctccggaag 360  
 tgaccttga cttggccatg cagcaacagc acgacgctga gcttgccgct gcagtggcac 420  
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<210> 7144  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-F2  
  
 <400> 7144

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 acggtgctcc tgtcctcggc cgccatcgtg tccactgttt ggcagtcgcg tccgcgtctg 240  
 gctacgctgc tattgcatcg cgagcgacga cttgagcgag ggcagcgtcc tcgagcttca 300  
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 ccaggtagca ggacgatgcg ctatggggga aaaanaa 397

<210> 7145

<211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-F5  
  
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 gccacggcga cggcaagaag gacggcgacc acaaggagaa gaaggacaag aagcacaaga 180  
 aggacaagaa gcacggcgag ggccacaacg acgacgacca ccacaacacc atcatcgcat 240  
 cccattagca ttctaccatt ttcctcggag agaagtagcc agaaacagca gcgccatggc 300  
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 gaatgacgag gagtacaaga atgcggacga gcacaagaag aacga 405

<210> 7146  
 <211> 343  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-F7  
  
 <400> 7146  
  
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 agcatthaagt ctgccctcat cagatgttcc agcgtagtac acacatctgc cgttcaggac 120  
 gatgtcgggtg aactactaa agtggacagt ggtacatcat atcatgaata cacaatggga 180  
 aaacaagcac gatacctgcg taatgactaa tgttgtctac gtgtcgaca cttcatgcat 240  
 accagatcgg aggatttctg gactgatgta tgctgtcatg tctgttttgc tgatgcatct 300  
 acttccttag cacatctgtg aaatcttgct ttgctcgatg gca 343

<210> 7147  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-017-Q1-E1-F8  
  
 <400> 7147

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 gggccgaggc cgaatctaga tacgcccgtc atctagcggg agaggggagg gagcgttgga 180  
 ggaaccggat gaagacgagt ttcacgtgta tgatgctcat cgtgatgacc gcagctctct 240  
 tctatgtgat ggtagtttag atgatcgata tcgacttgta atgtgaagtc aaactcgcta 300  
 ctccgggtct cgagacttgt aatataatgt tctatctttg ttgggtcttt tcaattcgga 360  
 gactaatatg atgaattgta ttcggagact aatatgatga attgtattca aagactaatt 420  
 ttt 423

<210> 7148  
 <211> 472  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-G10  
 <400> 7148

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 tcttctaaaa atgtaatata tatttaattg ggcgtggcta tatgtcaatc acgtgaaaat 180  
 aaatttaggg tcagtcactt tttcttttag ggcaagcagg cacgaaggaa cgctagccat 240  
 atgtaagtag tattagcgta aagtggcagt gctagcta at tcacgtgtgc acgtctattt 300  
 tccctttgtg tgcgcgcgag tgtgtctgcg cgtgcacgct gccacatgtg catgtgctcg 360  
 catgcgtgtt actccatcta tttctaaata tttgttttcc tagagatttc aacaagtgac 420  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-G11  
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 tttctcggag ttcattgcagg agatgctggt gatgatggat agcgtgaaat actagaagcc 180  
 ggacacgctc gaagacctgc ataagatgct ggatgacata gtcaacgggt acggcggttag 240  
 ccgcgccact gctgggtgctg gtggttagcgg aggcgggtggt ggtggctgct gtagtcgcgt 300  
 tccagcggat gccaaaccgca gaactcgtgt cgccccttac acgcagcctt cgctaagggtg 360  
 atggacgtcc cgggtgctcgt gacgtgcatg caccgctgca cttgtacgat agagatcaga 420  
 gcaagaagag agcaaccag 439

<210> 7150  
 <211> 303  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-017-Q1-E1-G12  
 <400> 7150

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 cagcaatgac cggttgattg tategctgac tggaaactgca tgcacccatg ggatacggaa 180  
 gcgagtatga cactgggaac acacgctaata aataatctgc tggaggttagc tactcacatc 240  
 tgttacacga gacatgctag atgaccatgt aaacgtatcc gtgggcaata tcttgatgct 300  
 gga 303

<210> 7151  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-017-Q1-E1-G2  
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 atccgtgtca acccaacagt cactttcaga gatacccata gtgtaccttt atagtcaccc 180  
 agttacgttg tgacgttttg tacacccaaa gcactcctac ggcacccggg agttacacga 240

tctcatgggc taaggaaaag atacttgaca ttggaaaagc tctagcaaac gaactacacg 300  
atctttgccc tatgcttagg attgggtctt gtccatcaca tcattctcct aatgatgtga 360  
tcccattatc aatgacatcc aatgtccata gtcaggaaac catgactatc tgttgatcaa 420  
cgagct 426

<210> 7152  
<211> 448  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-G6

<400> 7152

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aaaggcccaa gaataattat ttctgtgatt ccaaaaatat tggtttgagt tttagctctt 180  
gccaatatct tcagagatta gcaggaacat tttgttgggg tcatttgaaa atattttaat 240  
gttgatcatt tttaaaagat ttctgaggct tgagaattcc ctcaattcaa tttccttgaa 300  
tttaagatga tgcatggatg catatgcaat gacaagcaaa ggccaaagct agggctgtga 360  
cagccatgct ggagtccgga ccgcttcggg agcctgctct caacgccctg gcctctctag 420  
acgccagctg cccgcggcat gcatgcat 448

<210> 7153  
<211> 457  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-H10

<400> 7153

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atagtataag aaagaaataa aatttatctt tatttctata gtataagaaa aacaaatagt 180  
ataagaaaaa caaatcgaat caaatcatg gatttaccac gacctcgggt gtgactccat 240  
agataaaaaa gggaaatttc tctcttcgag accattgaaa aagggcattg aacgagaaag 300

aaatcgtcca cagatgataa aactatcata tgccttgga agtaatatga ggtgctcgga 360  
aatgggtgaa gtaattgaat aggaggatca ctatgactat agcccttggt agaattccta 420  
aagaagaaaa tgatctatctt gatactatgg atgactg 457

<210> 7154  
<211> 61  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-017-Q1-E1-H2  
<400> 7154

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g 61

<210> 7155  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 7155

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cacaagaaac ggcatggcca aatcgcttct gcatgctgcc agcgagacgt gctcagtttc 180  
agacgccgta tttgccatta tcagaggatca caagcaggcc ttggatgttt gcactatagc 240  
gcaaggggag aagattgttt tcagcgtgct gtcaaccacc tgggggttgg tggcggatgt 300  
tgacatcgag tccgagaaat acaggtggat ggggagcgcg cggttcgact tttatgctct 360  
ggttcgcata atgaacttgc gccgataccg cggaagtgtc cacttcgtgc ctgccccggg 420  
ct 422

<210> 7156  
<211> 444  
<212> DNA  
<213> Triticum aestivum



<223> Clone ID: LIB104-017-Q1-E1-H6

<400> 7156

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cattcacatg gttagtcata aaatcctaca taaaacttgt agatcactga atatgatgtg 180  
tttgattcct tgcaatagtt ttgcgatata aagatgggtga tattagagtc atgctagtgg 240  
gtggttgtgg attgcagaaa tacttgtggt gaagtttgtg attcccgtag catgcacgta 300  
tggtgaaccg ttatgtaacg aagttggagc attaggtatt tattgattgt cttccttata 360  
agtggcggtc ggggacgagc gatggtatct tctaccaat ctatccccct aagagcatgt 420  
gcatagtact ttgttttgat gact 444

<210> 7157

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-H8

<400> 7157

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aaaggatacc tacaagccta cagcattact agtactagca tccatgtgat gcacatgcat 120  
gctgcatata tatgcatgaa ctttcaactg gagataactc agatgacatg catgcagggt 180  
gcatacatgg aacttgagat agggaaaatg tttcgtgttt tcttctgagt ctatgttttt 240  
ttcttctgcg tttatgtact cggtttcctt acggccatgc tcgaaacttt ttcaagggga 300  
gaccgggctc ccataactct tttctggacc gtccttttcc tgctgggctc tttcggccgt 360  
ctgaggacac ttgctggaca taaggccttc aagataatat tctctgtgca gtgggcctgg 420  
t 421

<210> 7158

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-017-Q1-E1-H9

<400> 7158

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acattatatt acatgagtct cgattagtat catctgtcta gaggagtatg attcacttgt 180

catacactgc catcctgccc attaaggagt agttgatgca aatatatatg acggcatatg 240

ctcgaacgaa taaggatgct gacgctaagt aagatgatta cacaacttca accaattagt 300

actaaatgca gtaacatgca ccaatcatgg ccaattgatt tggacacaca cagtgacaaa 360

ttggtcgaag ttgaacatcg acttgactaa accacatca 399

<210> 7159

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-A10

<400> 7159

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gtagagtatt caacccaaat ttatagattc gacacaaggg gagccaaaga atatttgtaa 120

gtattagcag ctgagttgtc aattcaacca cacctggaga ttaattatct gcagcaaagt 180

gatcaatagt aaagtagtat gatagttttg atatcagtag cagcagcaat agtaatggta 240

atagtgatag cagtgatttt gtagcaagtg caacagtaac gatagcagta gtgacttggc 300

aagaacaata tgagagaaat tcgtaggcat tggatcgatg 340

<210> 7160

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-A4

<400> 7160

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attgattgtc ttccttatga gtggcggtcg gggacgagcg atggtctttt cctaccaatc 120

tatcccccta ggagcatgcg tgtacacttc gttttgatga ttaatacatt ttcacaataa 180

gtacatgagt tatttatgac taatgttgag tccatggatt atacacactc tcaccctcca 240  
ccattgctag cctcccggtg accacttaac tttcgccagt aacatacacc caccatatac 300  
tttcctcaaa acggccacca tacctaccta ttatggcatt tccatagcca ttccgagata 360  
tattgccatg caactttcca ccattccgtt tattatgaca tgcttcatca ttgtcatatt 420  
gcttttcatg atcatgtagt tgatattgta ttc 453

<210> 7161  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-A9  
<400> 7161

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ttttgccact ctcaccagga gatttcatgt ctgatcttga cgttcagatc ccaactgcct 180  
ttgacccctt tgccgaggcg aatgctgggg acgctgggtc agctgccgga tcaaaagact 240  
acgttcatgt acgcatccag cagcgtaatg gtcgcaagag cctgatcact gtccagggtc 300  
tgaagaacga gttcaactac cgctagattc ttcaagaacc tcaagaagga attttggccg 360  
ccaagggtac agttgtccaa gacacagatc ttggacaggt catccaactc cagggtgatc 420  
agaggaagaa cg 432

<210> 7162  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-B1  
<400> 7162

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ttttagttaa ccacaatcaa cttttctgta cacaccttc gagagaagcc ccacttgatt 120  
ggaatttatt agaatactct atgtgcttca cttatatctt ttgagctaga tagttattgc 180  
tctagtgtc acttatatct tttagagcac ggctgtggct taattttgta gaaattgtta 240

gtctctcatt cttcacttat attattgaga gtctcttaga acagcatggg atttgctatg 300  
 gttataaaat tggctcctgaa tggtaggcat ccaagttggg tataataaaa cctatcatag 360  
 gaagtgaatt ggatgctatg atcaatttga tacttgataa ttgttttgag atat 414

<210> 7163  
 <211> 332  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-B10  
 <400> 7163

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 tgggatgcc tggatggcat cccctcttct gtcttcgttc atcggtaaact ttacttgag 180  
 ctatatTTTT attcaccaca tgatatgtgt ttgcttgga gcgtcatgtc attttatttt 240  
 gttttgcttg atgtttgaat aaagtaccaa tatctgaagt tcttaaagt tagagagtct 300  
 ttacatagtt gcacaattat ttgactagtc at 332

<210> 7164  
 <211> 336  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-B11  
 <400> 7164

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 ctaatagatt ttgcaataa gtatgtgagt tctttatgac taatgttgag tccatggatt 180  
 atacgcactc tcacccttcg accattgcta acctctctag tategtgac ctttcgccgg 240  
 taccatacac ccaccatata gcttcctcaa aacaatgacc atacttacct attatggcat 300  
 ttccatagcc attccgagat atattgccaa tgcaac 336

<210> 7165  
 <211> 453  
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-B4

<400> 7165

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aaataacaaa aagaatgtac tgtcagaagg ttcatataaa ttgttaccgc tgcaaaaaca 180  
aaagaaggct ggaagtagat gccgaacagc gtggcagtag aaaggctggg ccggcaccgt 240  
gagttgcagc atccacattg tgcttctctc attctacaca gaacgtgttg aactctaagt 300  
tgaattgtac atagtacaat acacagatca tacatataat acatcatagt gataacctat 360  
actggcaata cccaatcaat ctattttcta tcatctacgt aatacaacaa tgccaatgac 420  
aatggcaatg ccogtctaat ctaaacctgg gaa 453

<210> 7166

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-B9

<400> 7166

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tactttgttt tcaatggctt gtacatTTTT gcattaagta tatgagttct ttatgaccaa 120  
tggttgagtcc atggattata cgcactctca cccttccatc attgctagcc tcttcggtat 180  
cgtgcattgc cctttctcac cttgagagtt ggtgcaaact tcgccggtgc atccaaaccc 240  
tgggatacga tagactctat cacacataag cctcattata tcttctctcaa aacagccacc 300  
atacctacct atcatggcat ttccatagcc atttcgagga tat 343

<210> 7167

<211> 325

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C11

<400> 7167

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atgaccttga gaggtctcaag aagatcggga accatcgtgg tctgcgtcac tactgggggtg 120  
tgcgtgtccg cggtcagcac accaagacta ccggcaggag aggaaagact gttggtgtct 180  
ccaagaagcg ataagctgct tcacaaagat tcctcatagc tttgctacta ctgtgttggt 240  
ccatttccag aatcttaagg gagtgttctt atttagatga ttaccttggc tgatgttttg 300  
ccctagataa tgttttggtt ctgga 325

<210> 7168  
<211> 98  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C12

<400> 7168

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tgacgctcgt cagtctcaag caccatcgta gtctgctt 98

<210> 7169  
<211> 414  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C2

<400> 7169

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aggagtcagg ctgtgtggaa ccaactgtgct gccatgcct ttgacagtta attttgacta 180  
tgctgtggag cctatagtgt gtttctgctg ctatattcct atttcataac tgttggtttt 240  
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tagtatgttg atgtttcctg attttccttg ggttgatga caactaggtc agttactggt 360  
gttactccac atagccacct tcttttttgg acatgtatgt tttgctgctg taat 414

<210> 7170  
<211> 432  
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C3

<400> 7170

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ctctctctct accaatcctt cttgcttccc ctctgtctct ctcaatgcc ctatatgcag   180
gttctgacat gtgcttttgt ttgatcccg cttgattttt tctttggtaa gattcaatga   240
tggttgatgc aagcccatgc ttctcacaag ttggattgaa gtttgctggt cctctatttg   300
tactattgtt tccttaccaa gtactatcag tactggggta gaaaacactt acctattaca   360
tagttctttg ctgacagccg aatgtgatgt ttgaacgggt tcccctatat gcaggaagta   420
caatttgcac gt                                                    432

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<210> 7171

<211> 242

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C4

<400> 7171

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actaattagt gacaaataat gtggcggaag tctaataatga actcaatcga ctttgataac   180
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ct                                                    242

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<210> 7172

<211> 239

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-C9

<400> 7172

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 actcactact aggagccacg gttttacaac aacgtgtcta tggaatgcc a ctcctatgaa 180  
 cgtgatggga cttccttcga gccttaccog gtactttcca tgtgcatttg agtttatgt 239

<210> 7173  
 <211> 321  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D10  
 <400> 7173

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 tcctcttatt ggcataatgca tttccgttct tgtgcttgcc aaacgtagct tgattttggc 180  
 gatgtcgatg ttctttctct tcaggttgct cttgtgtagc attgccatgt agagaagtgc 240  
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 atgggtgttat cggacatggt g 321

<210> 7174  
 <211> 119  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D2  
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<210> 7175  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D3  
 <400> 7175

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 ggcgagtcg ttcctgacgc tgacgggggc catcggtccc gcgtggacgt tcctcatctt 180  
 cggttgctg tccgtggcag cgctcgctt cgtgctcgtc tgcgtgccgg agaccaaggg 240  
 actccccatc gaggacgtgg agaagatgct ggagaagcgg gaggtcaggc tcaagttctg 300  
 ggcaccgcgt ggccgcggca gcaagaacga cggggtgtga gtgtcatccc taccttctcc 360  
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 gc 422

<210> 7176  
 <211> 327  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D4  
 <400> 7176

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 cacaatcgac atattggaga ggaagtgtga tgagcatttt gccatccatc aggagaaga 180  
 ctcaaagctg ctcggtgca tgattgacga ctacccgaa gagtcgccgt cactagtgtc 240  
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<210> 7177  
 <211> 80  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-D7  
 <400> 7177

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<210> 7178  
 <211> 336  
 <212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-018-Q1-E1-D9

<400>      7178

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gactgaaact ccagcaactc ctcttaacac gacgcaccta cggatgcctt gacgcgtcat   60
cgctagctgc tccgtttgca tgttgccacc acgccggctc atcttcgcga acattgattg  120
agacgagagt cccttagtat gtgcttctcc gtctacacaa ggttgcacct gcatcgcttg  180
tggtcatcat cgctgacaac tacatcgctt cccagcattg tcgccgccac caccgctcat  240
ggctcttggtt aatgccaaac ggttcttctt cgcagccact agcgctgcca tgcgactaca  300
tgtggatgac tcatgtttaa tccgccacat cgagta                                336
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<210>      7179

<211>      417

<212>      DNA

<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB104-018-Q1-E1-E1

<400>      7179

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cgggtcgacg cggctgtgat gtattagtga taatattcga cgatgtactg acgcatgaga   60
tgatttactt ttgcttattg aatgcatgct aatttgagtc ctataagata ttgtgaaatg  120
tatatcttgt gttgctcaat atccaagtgg ccgttcatgt ttgcagggtta caccttcgag  180
tggcctatgt tttgccggag tgttgattca tttccgttcc ggcaaatttc aggcgctcga  240
tatgtcctat tttagcaaag gtcatgtcgg atttttccat gaattttggc atgacttggtg  300
tcagaatatg taggaaatat cgagtgcctt ggatttggtt gagtatcttg gtagttgtct  360
tcgattgatt ttcaattaat gttttaacta tgaacatang aaatgtctga cgacgag      417
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<210>      7180

<211>      70

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-018-Q1-E1-E12

<400>      7180

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agtcccgggc agacgggtaa gttatacatt cttacgaaac gcaaattggc aataagtact   60
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ctgccaaaca

70

<210> 7181

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-E2

<400> 7181

cgggctcgacg cgggtacaatt caatagttac aatcattgtc gaatcccaag atgtatacaa 60  
ggtctatagt acttcacaac atgctcaaac tcacataatc ccagtcaaatt gagaatctaa 120  
atgcatttca tagttattac tttgtaggat gcagcacaaa caaccaagac tctacatcag 180  
ccattataga agcaacattt tgacatatcc catttgtgtga atgaaacgtg cagagagagc 240  
ttttgaagat ggagtatata gggcgggaaa gattgtatgt atgtggacga gagagtagga 300  
ggcaaaccaa acaagacaga aaaaagcgaa aaagaaggag aaagagatag gaaaaagtaa 360  
ggtctgtgac aaagatggag acatgtaata tacatgattc ggtatacgtg gaaggagaag 420  
agaccacatg 430

<210> 7182

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-E3

<400> 7182

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acgcacagtc atccttccac tttgctagcc tctgttttac cgcgcaactt tcgccggtag 120  
catgcacca ttacttacct tcctcaaaac agccaccata cctacctatt atggcatttc 180  
catagccatt ccgagatata ttgccatgca actttccaca attccgttta ttatgacatg 240  
ctccatcatt atcatattgc tctttgcatg atcatgtaat tgacatagta tttgcggcaa 300  
agccaccttc atattcattg catatcccggtac actgcccga gaggaattca tatagagtca 360  
tatcttgttc tagctttgag ttgtaattct taagttgtaa atcaataaaa gtgtgatgat 420  
cttcataatt ag 432

<210> 7183  
 <211> 353  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-E4  
 <400> 7183

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 tcccgtagca tgcacgtatg gtaaccgttg tgtgacaaat ttgaagcatg aggtgtttct 120  
 ttgattgtct tcottatgag tggcagttgg ggacgagcga tggctcttttc ctaccaatct 180  
 atccccctac gggcatgctg agtagtactt tgcttcgagg gctaataaac ttttgcaata 240  
 agtaaatgag ttctttatga ctaatgtgag tccatggatt atacgcactt ttacctttcc 300  
 atcattgcta gcctcgctcg gtacgtgcat tgccctttct cacctcgaga gtt 353

<210> 7184  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-018-Q1-E1-E5  
 <400> 7184

ttgacgggtc caacgctaaa ctttaaaaca gacactatct gcttgtgcac cgggtccgga 60  
 cagtccgcgg acaatgatac agaaatcggc aatccaaccc tgtctttaa cgtttgtcct 120  
 tattttctct taaatacaca acattcaaca taatcataga aaatggcata attcatacat 180  
 aaataacatg caaatatcca taagggcatc tccaacgtag gcctcaaac gaacaatata 240  
 cttgcccgtg gactggctct gattgattca tggacattgg tacgggagcc gtccatccga 300  
 ccatgtcccc tagatgtctg cttctgtttc tttttttaag ttttcgagct caaaataata 360  
 gcatagcaaa tctgogatca gagagnatat tcagatggga caattttt 408

<210> 7185  
 <211> 365  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-E6

<400> 7185

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tggtcaaaat gttgctttta taatggatca tgaagagtta tgggtgggtt gttgcatcct 120  
acaaagtaat agctatgaga tgcattttaga ttttcatttg actgggatta tgcgagtttg 180  
agcatattgt gaagtactat agacctcgta tacatatcgg aattcgacaa tgattctaag 240  
tactgaattg tagaaacat tacattcaga atcagtagcc taatatattt agttctatcc 300  
atcacatata cacacattct catcataagt ttgatttccc tcaatatctc gcacacacac 360  
actct 365

<210> 7186

<211> 323

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-F10

<400> 7186

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tccgatagcc ccccgctc caaccccgct ggcgccaatc ggaatgtagc tctccccag 120  
tagactagtt taagagcaga agaatatagt taatggttcc tggatgagaa gtggaaatgc 180  
tactggctgt ggaaggagga ggtttcttct catcgtcagc ttcaggatag agtcatggcc 240  
ttgctctttt gctgcttggc cggaagaag acgagaagcc tgtcaaggca tggagtcagt 300  
accgagtagt cgatggggaa gct 323

<210> 7187

<211> 321

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-F11

<400> 7187

ccgggtcgac gggtccttga tgttggtggg ttcggtaaag tttaccaggg agagatcgat 60  
gggggcacaa ctaaggtggc tatcaagcgt ggcaaccct tgtctgagca gggcatacat 120

gagttccaga ctgaaattga aatgctgtca aagctccgcc accgccatct tgtgtcgctg 180  
 attggttact gcgaggacaa gaatgagatg atcctgggtct atgaccacat ggcccatgga 240  
 actctgcgtg agcacctata caagaccag aatgcgcccgc ttagctggag gcagcgtttg 300  
 gagatctgca ttggtgcagc c 321

<210> 7188  
 <211> 89  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-F12  
 <400> 7188

gagcatggca tatactttgt ttgtatagtt aatagactta tgcaatatgt atgtgagttc 60  
 tttatgactg atgttgagta catggacta 89

<210> 7189  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-018-Q1-E1-F2  
 <400> 7189

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 acgacgacga atgacctccg taagatactg ctgactgcaa catgaacacg aaccgtcggg 120  
 ggagccgtag tccagttgaa gtccacgatg accactctaa agggagtgac gggttatggac 180  
 ggaaagagaa catgagagat ctacagaatg atagtcatgc cagaccaggc agaggatcatg 240  
 aacttgatcag gcattctgat atgcatgcct atggggcttc acgtgaatcc angatgcatg 300  
 atgattatag gacgtaccat gatgtacgtg ctgatgatga aaggagccct ccttagaact 360  
 tcccggccaa atcgggagtc aagggtctgac acttactatg attcctcaaa ccgtgatggc 420  
 acat 424

<210> 7190  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-F3

<400> 7190

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acaaatggta gaggagggca gcgcactggg cgcggtcaca attcgggtcta ccgtcaggtt 120  
gatgttgag gaggcaaaac tttaaaccgc aagatactga gacagtgatc aagaagcgac 180  
agagtgagga gaatgattct tcagggtcca aagatgatag ccgtgactca aagaagaaac 240  
aggcagagaa ggatgttgct aagactctgg cgagggtga gcatcagccc cgcggtacac 300  
aatgaatttc ttttcatgga acaatcgcg gcttggaac ccggagacag ttcgagaact 360  
tcatagcctt atgaagatgg aagggcccg cttggtcttc atgtgtgaaa c 411

<210> 7191

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-F4

<400> 7191

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tctgggttgc catgcatgca tgcaattgca gtatttgagc gcactgggag gtatgcatat 120  
gacttctgtg tggagtattt cagcagaaa cggtagcgct cgacctattc aatgtccata 180  
aatccgatac ctgatgttac cttaacggac aattctcaga gtccagcgac attaccattc 240  
tcaattcaaa ctgcgcgacg ggttggcagg ccgaaagaga aacagctgat ccgcccata 300  
caattaacat ggcagtggc tgcagcagat gtaaaagtta tggcacatc aaagcaactt 360  
gcaaaattcc tatcagtggc gaagcccttc cgccttgcca ccagctgagc tcttcgatgt 420  
acacagtaag gtgg 434

<210> 7192

<211> 351

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-F5

<400> 7192

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ctcggagatg gtgtagttta caagcgacct ctagtcagtc ttctgcgaca catgcgcaac 120  
atttcaccac accctacaag gaccatacga ctatactgtg ccagggtccc agtatttcca 180  
gcatcatgtg atttttgttt gattttaacg gctggatccg gcatgccgcc aaggtaacatt 240  
cacctccctg ggggtggggca tgcccctcct tgggttgac taggcctact catagctcaa 300  
atacatcata tatgatttga caaacgacct ctggacatca tttcaggtgg c 351

<210> 7193  
<211> 181  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-F8  
<400> 7193

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gatctgattt aacaactagg ctggggagtc tagtgcgga tcactctgagt tcgctcccgt 120  
gggaaatcaa ctccggagtc acgtctcgga tgcactctgac tgattttaga tgggagagaa 180  
t 181

<210> 7194  
<211> 320  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-018-Q1-E1-F9  
<400> 7194

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cgtctatcgg taactttact tgaagctata tttttattca ccacatgaga tgtgtttttc 120  
ttggagtgtg ttgtatgatt tgagtctttg atttttagtt taccacaatc atccttgctg 180  
tacacacctt ttgggagaga cacgcatgaa tcggaattta ttagaatact ctatgtgctt 240  
cacttatatc ctttgagcta gacattagtg ctctagtgtc tcacttatat ctttttagag 300  
catggcagtg gttttatttt 320



<210> 7195  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-G10  
  
 <400> 7195  
  
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 tggagcttcg tcagagcctt ttccttcccc acaggccaga gctcaattta ccttcgccag 120  
 agctctaaga taaggagaat cagctcagga taaaagggtc cgcactcaat tgatccgggt 180  
 caacacttcc tgtatctggt ttcggcttgg ttttgactcc ttgtaggggc tcatgacagt 240  
 cctgtagggg atacaaaagc tttccgagca gtagcggcag ctgggcggga gagttgggta 300  
 ttca 304

<210> 7196  
 <211> 305  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-G12  
  
 <400> 7196  
  
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 caaggcaatg ccgagtctta gttttacaaa agtccaggaa gacaattgta cttcgtcaac 120  
 atgtgccatt tgcttgaag actacagtgt tggtgaaaag ataagggtgc tgccttgctg 180  
 tcacaagttc catgctgctt gcgtggacct gtggctcaga tcatggagga cattctgccc 240  
 tgtatgcaag cgagatgcac atgctggaat gtcaaatttc cctccatcag agtctacgcc 300  
 tttgc 305

<210> 7197  
 <211> 78  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-G2  
  
 <400> 7197  
  
 ggagtctcga ggagcccacg agataggggg tgtacgtagg tttctgttgc tctagcgggt 60

cgtcagggcg agcagata

78

<210> 7198  
<211> 244  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-018-Q1-E1-G4  
  
<400> 7198

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catggtcaag cggctcgctg cattcttttc cagaggttgt atatgtagaa tatcagaagg 120  
agcacacatg ggaagatagg tcaacaggat tgtggccgcc cttccacagt ccgatgctga 180  
ttccttcttt taagactcgg gaatctgaaa taccaccgag aatgttttcc gtttctctgta 240  
gttc 244

<210> 7199  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-018-Q1-E1-G5  
  
<400> 7199

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aagaacactt tttttaaata attcccgtat tacaagttta ttatttttcc tggaaacttg 120  
gtcacatatg atgacacaat gtgaaggttt tccaattttt tgaatttttt atgcccgttt 180  
caaaatgcgg tcaaaacggc gggcttgacc gttcctagct agtgggttgaa tcttggaana 240  
aattggatgt ttctcttatt aaatagatac ttatgtacct agaaatgatt tttggaaaaa 300  
ataaatagca aactatgagg cagctacagt tcaaatttga cccgcttcct actgaatcgg 360  
ccgaaatttg tcttttcacc agagatggac caaagctttt gacaccaaac cattttgtta 420  
aatgtgcaat aa 432

<210> 7200  
<211> 316  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-G6

<400> 7200

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caactttttaa taaatttttac tatttgtact tttccgtatg tgatgtcatt acttaccata 120  
agattagcct atgatatttc tcattatttt ctttttagttg gttgacataa gaaagtatag 180  
aagcacaaac tcatactaag cttattata taactctcac tcgattacat agatagatag 240  
atcacgagac taagacttga caatagatca gactaagcct ttattcaact tgtgatgatc 300  
atcattatttc attatt 316

<210> 7201

<211> 236

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-G8

<400> 7201

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atttgacgtc cagtacatca tcgactagtgt atgtcacccgt tgatctgtat gaataacttg 120  
tgtcaaataa tacgggggaa atgactagtgt aagtcaaacg acctgtaact tgttactcta 180  
atcttttgca catgtacatg ctaatcatgc cataaacacg aactgttcgc ttcaga 236

<210> 7202

<211> 282

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-G9

<400> 7202

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ctgctgtccc ctcaggtaga gaatcctgta tatggctggg aagacagaac cactgctgtt 120  
agtactacat agataggect gtaatttgtg aactaattc tttttcctcc tctccctgat 180  
gccaacggca aagccttggt cattattacc aatacgaact acagactgct tgtagcacta 240  
gataaacatt gtgtattcga tatttcgatc ccttgagttt tg 282

agcagcgatt gaagaagcag caggaccggt cgattcaaat ccaaagtta ctgttgctag 180  
aatcgtttgt tgactaagtt gacaagccct gcgtacgcgt caacttagta ggcccacagg 240  
tcagcctccc aaccagtgcg cccagatgt cagtgggagg aatcattttt ttgcgtaata 300  
aggaggcagt tgattgcgtg cggccaggcc agtggaggga gtaggggtggg cgggggaagc 360  
ctacgcgaca tcacagcggg ccacatgagg agggagcagg cagtctcgcc ggtgctagtt 420  
taggcggctg gagc 434

<210> 7445  
<211> 413  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-F1

<400> 7445  
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ttgcgaactt cgagtacata gatgaggcta aagcttttagc agcaaaaaag aaggcacgca 120  
aaaaaacggy aactgaaacc gcatccaata aagcaaacta ttgggaagaa ttattaaaga 180  
cagatgcgtt gagcaagaag tagaagaaat tgctatggga aaangaaaaa gaagccgcaa 240  
gcagatggct gctgctgatg aagatgacat tactggcctg cacgagttaa gttctgaaga 300  
cgaagattac tcctatgatg atgatgtgtc ggataatgac acgagtttac cagcaaattg 360  
ttctgggagg aangetcagt attctaagaa aaactcacgt aatgtagatt cac 413

<210> 7446  
<211> 397  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-F10

<400> 7446  
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caagtgatcc agccgatgtt catgtccggt ggtattatta tttttaccgg ggaggaggaa 120  
attgtgcatt gcatattagt agtaaggaat gcggctctcg tttccttgctc tttgccccga 180  
accagaagaa gcgtactagt agacgtagtt gctgaagagc actcatggaa tcctcctccc 240

<210> 7203  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-H1  
  
 <400> 7203

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 ggaagtaatt caggtgttgg aaagctgaga tcggacttcc tggggacaaa gttegtcatg 120  
 tacgacaatc agaaaccata cgacggcgcc aagtccttga agagccgatc aagtcgccgc 180  
 tttgcgagca aacaaatcag cccacacggt tcaggcgata atcttgaagt tggacagggtg 240  
 tcatacagggt tcaacttcct caaatcaaga gggccgagaa gaatgcactg cagtatccag 300  
 tgccccgtag gtcagggcac cgcattccgat ccatccaagg agaagccacc gagcaactcc 360  
 agtccttgt ctctaaaaaa caaagcgct cggtggcacg aacacctgca gtgctgggtg 420  
 cttgaatttt cac 433

<210> 7204  
 <211> 303  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-H10  
  
 <400> 7204

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 gatattccat cggcgcaaaa tacatccacg gcaagttgca tgagtgtgcg aagcggtagc 120  
 gcagcttctt cgagccttgc tctacctcg ccgaaagagc atcaaagggg attcctctga 180  
 gtgcattagc atcaactcaa gtcaagtcgc ggctatatgt gattgtaggc ctggtacttc 240  
 tgtcagctga atgaaattat gccaccgagt tatactgcgc gatgaagggt gtgaactggt 300  
 gag 303

<210> 7205  
 <211> 265  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H11

<400> 7205

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gtgctccatc tctgcctcac gcttccgcta ccattcgtag atgcagatcc cggcgcggtgt 180  
gcacatgtcc gtcgtcgtcg gtctgctctg cccggcgggc gttgatagga gcgttactca 240  
tccacggatg agccgtattc atccg 265

<210> 7206

<211> 217

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H2

<400> 7206

tggaaaatag aataccagaa aaggtcagtg gtgttttgga gggcgccctcg tctgtatgta 60  
ttccatctgt gtaagttaat tcatttgggt gattgggttcg gctgtaggcg gtatatctca 120  
atacagtggg ggatttgtaa tgtttctggt tttgtgttcc ttgtgagatg aaataataac 180  
ttaacttggt tataacatgc tcctcaattt tcttctt 217

<210> 7207

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H3

<400> 7207

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agtaagtagg gcaacaagta tgagaattta acttggctgt gttttcaaaa gaagctggcg 180  
cacctgaaag ctgattttgc atgtttttcc ccatgcatgt atgtaagctt ccaataagga 240  
accaacccat gatcttattg gtgatagcat tatcatcact aggtaagggt tatgatgtgg 300  
tgcttatttg ctttgtcaga atgaatccat tgtgaaagag atttgcaaaa caaaaa 356

<210> 7208  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-H4  
  
 <400> 7208

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 acgcagcacc taaaatagcc tcagaacgaa atttatgaag tggcatgatg aggacatgac 180  
 taccttggat atgaccaaaa atattgcata tatgcatatt tgtcagggtga tttctagtgc 240  
 aaactattca ataatctatt tatgttatcc agaacaaaaa tacttcacac acttttgtgt 300  
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 cgaaatttta atttccgtcc aaaaa 385

<210> 7209  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-018-Q1-E1-H5  
  
 <400> 7209

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 gctcgtcct tgatcatatc gtattgccct gaaaagcaag attgttctcg agcttaataa 120  
 cagatcggtg gtttgtgatt ttccggatat cttctctgga agtgttacta tgttgtcagc 180  
 tgaccgctat gttgagttcg tgatcaagtt ggatttcctc caaaccaccc ttctccgtct 240  
 gtcctgcttg gtttgtcgt cgtcttagag ggtgtgcgtg tgttcatggt ggagtgtgat 300  
 gtctgggcgc gtgcgtgtgt gtatgtatag gtctcggtgg tgtgggaggt gtccagtacg 360  
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<210> 7210  
 <211> 247  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H6

<400> 7210

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ccgtgagaat gatctttatg tgagtggcat gttgatgata tgactatctt ggatatgacc 180  
aataatattg catttctgcc tatttgtcag gtgatttcta ttgcgcacga ttcgatactc 240  
tatttat 247

<210> 7211

<211> 322

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H7

<400> 7211

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gtatccaatg atgactcatt atctacacgc attctcaatg aaactaccct tcaactatac 120  
acatttattg caacatcaac tcatataatc atctacatgt acataaaaac gatcaaaaca 180  
caattcataa tgataataat gagaatgatt agatctacat taaatattgc taatgtcat 240  
atatggacat tgccacgatc agaaaagata ataataccga tagcaaacad aatgataaaa 300  
atacctccaa cgagactgga cc 322

<210> 7212

<211> 348

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-018-Q1-E1-H8

<400> 7212

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acgaggggtt actggttcgt ctgctgtcgc cggagaataa cagcaggtgt gggtagtag 120  
agggatggct aggcctgcga tgggagtacg gtggggcggt gaggcctgcg cggcagcaga 180  
gccggccgtg gggaggaggg agcaggcagt cctgccggcg cttgtttgag cggttggagc 240



aggaagagca gagatagaag aagcatgacg gccgttgat ggacatccaa cagtcagtgc 300  
 ttgtgcctca acctttttttt aggaaagcct caaatccatg gaaaacag 348

<210> 7213  
 <211> 233  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-018-Q1-E1-H9  
 <400> 7213

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 cggcggtgac ctgggaccgt agtcaattg caagcggcac tctgtttggt gattttgaag 180  
 taaatgctgg tacaacagat gccggtttat taatcattca gtaggggtat aca 233

<210> 7214  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-A4  
 <400> 7214

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 cgaccattg tacacaacaa cgtctaggca tctccacgac acgtgcgacc gcctgtgttt 180  
 tgcttttagac ccgatggcac acctgataac aaattctttc caccacgaca agcaatcata 240  
 cttggttttc tccgatcgtt ttatgatgag acacaagtac atgggcttaa gcacctaga 300  
 ttgattcttc tcgggtgtagt tgtgtacgta tacaaaacct aatcacatat gtatacaaaa 360  
 caccctgatc ctttagatta aacatttctt ttggctacac atcacgtcca catgagacta 420  
 tatttaatgg caataaggtg ttggctct 448

<210> 7215  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A7

<400> 7215

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tccaatttaa gggcctaaaa ccccaaatta atataaaatg cacggaaaat aacaaatgaa 180  
gtcacaaagt attgaaaatt gatgatgtgg ctttgaatgg tgcattttga acacacaaaa 240  
agtcacgagt tcaaataagt tttaaaaaat caaatcccta tgtaacagac gagtttccgt 300  
atgaaatcct gatactttga aagagattgt ccgttttgta cacgaagtgc atccaccttt 360  
tgccggggagc ctctcaactt tcttgcacat gct 393

<210> 7216

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-A9

<400> 7216

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tgcccgtgct ctctacggcg agctccggcg tcggtgagcg ccagggggaa gttaaggggg 120  
tggagacgac gatggtggcg aagcatggca tgcttgggcc ggttgggtaa ccagcacgcg 180  
ctcaacagag cactacgagg cacacagagc gcgtgttttg catgccagca caccgggacg 240  
aacgtggtca ccgctgaac cgtgacatca ggccacccta agcgctaacc tttatgtctg 300  
gcgtgtagtc cttagtagtt tgaagtgtta ccatggtttg gcttggatcc aggtgcagtt 360  
gaaatagatt tgtactgctg gcaagtttct gggc 394

<210> 7217

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-B1

<400> 7217

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atacttttgt tgaggtttgc aagtcccgta gcatgcacgt atggtgaacc gttatgtaac 120  
gaagtcggag catcaggtgt ttattgattg tcttccttat gagtggcggg cggggacgag 180  
cgatggtctt ttcctaccaa tctatcccc taggagcatg cgtgtagtac tttgttttga 240  
tgactaatag atttttgcaa taagtatgtg agttctttat gactaatgtt gagtccatgg 300  
attatacgca ctctcacct tccatcattg ctagcctttt cggtagcgtg cattagcctt 360  
tctcacctcg agagttggtg caaacttcgc cggtagcatcc aaaccggtga tatgata 417

<210> 7218

<211> 366

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-B5

<400> 7218

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cgcgccaccg attctcgcta taccaccacc atcgggggtca agccatcaga aaaggattga 120  
agggcatgag attgggtcgg tcagggtgcc agcgtgtagc acattgtgtg gtttccctata 180  
tgatgatgag attggttgat tgattctgcc tgggttgggt gggtggctgg tgttgataac 240  
tgtcctctgg ttatacaggt ctgctcaaag tgtagcgtga ctgagtcgag cggtaagaat 300  
tgaattgca tgggaggaac tctgtttttg tcgagtcgga aaaggcgggt cgggtgcgcg 360  
ccttgt 366

<210> 7219

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-B7

<400> 7219

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cgcgctggag ctgtcaggcc cctgcacctc ctccatcatc atccggctgg acggcaacct 120  
cctcggcacc ggcgacctca ccgcctacaa gaagaactgg atcgaggtga tgcgcgtgga 180  
caacttcacc atcaacggcc acggcaccat cgacggccag ggccccctcg tgtgggagaa 240

gaaccagtgc agcaagcact acgactgcaa gatcctcccc aacagcctgg tgctggacta 300  
 cgtgaacaac gcgacgatcc ggggcatcac gctcaagaac gccaaagtct tccacctcaa 360  
 cctcttcaag tgcaagacgg tgctggtgga gaacgtggag atcacggcgc cggggaacag 420  
 cccaaca 428

<210> 7220  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-C10  
 <400> 7220

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 catcgcgac caactggagg ttatcatcaa caggcggcat attaacatga tgcagcacat 120  
 gctctagctc aagtattcgc accttatctc gatctccgcc ttcaaaaacc cctgcgcca 180  
 ttccatcata ctccaggcac ctgtctctct gacacagtct gcaactcgatg atgattatct 240  
 acgtagatta aggcacgac gtatacccaa ggatcgtatt cgacgactac atgttctctgt 300  
 acatgcgcca aatctacgag gccaaagtta cactgttcac agccaagtac gtaaattgccg 360  
 cat 363

<210> 7221  
 <211> 293  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-C11  
 <400> 7221

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 aactggaagt tatcatcaac aggctgtata tataacatgt tgcattacat gctctagctc 120  
 aagtattcca accttatctc gatctccgca ttcaaaaaac cctgcgacaa ttccatcata 180  
 ttccaggcac cttgtgctcc tgagcacttc tgcaactccag atatgattta cgtatattaa 240  
 ggcatcgacg tataaccaag gatcgtattc gccgaatata tgattcctgt aca 293

<210> 7222  
 <211> 202  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-C2

<400> 7222

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 ggcatatttt catcagggaa tcatgcttcc accagtctgg ggattccaac aggaaactga 120  
 acccgacgca ctaccgggag ccgaggttct acaccaaagt gtttaaagaa tgccactccc 180  
 atgaccaaca ggggaattcc tt 202

<210> 7223  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-D3

<400> 7223

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 tatctggaag ggggtgggtg ctgaagtaga tctattttat aggaaagaac ttcctctaag 180  
 gggttttgat gatgagatga gaacagttgt tgcaagtaac cttgaacgaa ggggaatccg 240  
 attgcatcca gggacaaatt tgaccgagtt gagtaaaaca gccgatggca ttaaagttgt 300  
 gacagataag ggggatgagc tcattgcaga tgttgttctt tttgctacag gtcgtgcgcc 360  
 gaactccaat aggctgaacc tggaagctgt tggtgttgac gttgatcaaa tangagccat 420  
 caaggttgat gaat 434

<210> 7224  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-E3

<400> 7224

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 tttggttttt gatgacttct aaatttttgc aacaagtaca tgagttcttt tgactaatgt 120  
 tgagtccatg gattatacgc accctttcac ctttccatca ttgctagcct ttcttgtgcc 180  
 gcacaacttt cgccggtacc atacacctac catatacctt cctcaaaaca tccatcatac 240  
 ctacctatta tggcatttcc atagccattc cgagatatat tttcatgcaa ctttccacca 300  
 tgtcgttcat atgacacgca ttacttttgt cacattgctc tttgcatgat catgtagttg 360  
 acattgtatt tgtggcaagg ccacottcat aattttcata catgtcgctc ttgattcatt 420  
 gcatatcccg gtaca 435

<210> 7225  
 <211> 317  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E4  
 <400> 7225

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 attcttcacc actgtcgtct ctcttattgc gttttagagag cacactttcc acgttcaagc 180  
 tttccattac catctacacc aataaatgta acaccaatag tacttgaaca gttaatccat 240  
 gttcaatacg acttctaaat taactgtgca catctttggg gtatactgag aacctccttg 300  
 tgaagcagca ttatgta 317

<210> 7226  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E5  
 <400> 7226

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 gatgagtctc ttcggcctcg gacggaatca gaagacgttc cgtcccaaga aaagtgtcc 180

atcaggcagc aagggggcac agctccgaaa gcacatagat gcaaccctcg gtagtgggaaa 240  
 ccttagggaa gctgtgaggg tgctcctgg agaggatata aatgaatggc ttgctgttaa 300  
 cactgtggac ttctttaatc aagttaacct gctgtatggc acactcacag agttctgcac 360  
 atccgaaagc tgcccaacaa tgactgcagg cctaaagtat gagtaccgat gggctgatgg 420  
 tgtacagata aagaagcc 438

<210> 7227  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E7  
 <400> 7227

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 ccccgatgg catcacctct ttctcttca ttcacggta agtttacttg gagctacatt 180  
 tttattcacc acatgatata tgttttctt ggaccgtcat tttattttgt tttatgcttg 240  
 ctgtttgaat aaaataccat gatcttaaat tcttatatgt tagagagtct tcacatactt 300  
 acataattat tcgactactc attgagcttc acttatagtt ttctgagtag tttgtcgttt 360  
 gctctagtgc ctcaattata tcttcttaca gaatggccgt ggttttaatt catataaatc 420  
 gatgaactct catgcttc 438

<210> 7228  
 <211> 315  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-E9  
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 gtggaattga cttgattagt cagctttgaa atgggtatacg tggcacgtgc acagcacaat 180  
 gcaattttcc aaactaaata taatatttat gtctgatgg aatgtcaagt ctgctctatt 240

gtatgatatg aacctaggac tgtatcttat tgggaattaa gagtcacgga gccaaaattg 300  
tactctgttt cgagc 315

<210> 7229  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-019-Q1-E1-F2  
  
<400> 7229

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ttttacttat tccgtgggtc ggaagcgggg ttcacatcat cctgcgtacc gcataacgag 120  
aatgaacccc acgccctcac catcacaaca acctgatgtt atttagccct tttccttctt 180  
ccagggcctg cagctcttct cattccggca gcctgaaact tgagtgaata aaatgtcttg 240  
tatcgtctaa ccgttttgct acggccatth gagatggttg atacatactt acatcacggg 300  
tcaatgatg agcttatgat gtcttgatca ggacatgttt tctgtgtgtc attccatttg 360  
tgataaatca tttcaaatga atgttgatg caccatggan caagctc 407

<210> 7230  
<211> 251  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-019-Q1-E1-F3  
  
<400> 7230

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attgttaggt ccgcagtttg ccactttgta atgttcctcc ctacatagcg ctgtcatgcc 120  
atgtgtcatg tgtgccttgc tctcagcagg gaagttgagt tgttgatgt tgtgtagcag 180  
aacgatgctt tctgcctgtg aatgtaaaac ataagattgc ctaaaaaaaaa tcaatcaaaa 240  
agaaaacaaa a 251

<210> 7231  
<211> 436  
<212> DNA



<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-019-Q1-E1-F6

<400>      7231

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cagttttagtag aggctacagc catggtgggt aagggtgact tgcattctgac aggacaactt  120
ggcgatgtaa ttaaggaatc agcacagtta gctctgacat gggtgagagc aagatctgct  180
gaccttaatc tgtcaccac ttctgatatt aacatattgg agagccgtga tatccacata  240
cattttcctg ctggtgctgt gccgaatgat ggtccttctg caggagtgc actggttaaca  300
tcactgggtgt cattgttttag taaccgaaaa gtcagagcag aactgcaat gaccggagag  360
atgactctta agggcctact gttgccagtt ggtggagtta acgataacgt gcttgctgca  420
catcgatatg gcatca                                         436
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<210>      7232

<211>      371

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-019-Q1-E1-F8

<400>      7232

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cacaaagtca gcgtcgagtt gcgtcactgg gacaatatca actactcaca tttgggaatc  180
atagacttgg aactaatgca gatcataaat tacgatgtgt cgcgcatagc ttgtgaatgt  240
ccatcagctt gaatatgatg ctgtggaagg cctaccaagt gtgcctgaca tcaaactgac  300
tattggtgtg attaacatct atcccggtc atgtaccagc agtttataac atttagttac  360
catatgtttt t                                             371
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<210>      7233

<211>      356

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-019-Q1-E1-G11

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 aacagacagg acagtttctca tttttcacga ccacaaaatg aagttttatg taaatgacct 180  
 atcaaataca tgttgaaca tagcatcaga tcattttcac aactatgaa gacatatcta 240  
 acgcatatat gacaacatgg ttgggtgtta tcgaatatga tccaacgcta gatgtaaaca 300  
 gaagattgag tcagttcatt aggaatagag acacatttta actacatccg cctcac 356

<210> 7234

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-G2

<400> 7234

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 ggtcggaaac cctctcctct agacttggtt cgttggttcc tgctgatact accatcgcca 180  
 ccgaagctct gtcgtcgtcg tcgagctcgt caccgtcagt atcgtgtact ctagggccag 240  
 gcaagcacgt caacgtgctc gtggcgctcc tgtggtaccg cctgagccgt ttgtttgatc 300  
 attctccccg cgtatccccg tatccgttga gctcttgctc cggccgccgc ttgccgtcat 360  
 tgcttcggcc aactccggcc atctctgctc gtgtcgttga tttcgttcaa cgcgcgacgt 420  
 cccgcccgat 430

<210> 7235

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-019-Q1-E1-G3

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 tcatgagctc cgtaggtata agaaaacaaa ccaccacttt aagggtacttt aatgaaatca 120

ttctttatctt gtattggtgt taaacctact gtattccaac ttctctatgg ttcgtacccc 180  
ccgatactac tcatagattc attaaaataa gcaaacaaca cagaaaaaac agaattctgtc 240  
aaaacagaac agtctgtagc aatctgattc atacaaatac ttctgttaact ccaaaaattc 300  
tgaaaaacat aggacgacct atataatttt tttaatgatt tactgcagtt ggaatcagta 360  
ttttatct 368

<210> 7236  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-019-Q1-E1-G8  
  
<400> 7236

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cgaggatgtg aactccctgc agccaagga gctgatcgcc atcgaggagg cgctcaccaa 120  
cggccagacc aacctcaggg acaagatgat ggaccactgg aagatgcaca ggaggaatga 180  
gaagatgctg gaggaggagc acaagctgct ggctttgagg atgcaccagc aggacgacct 240  
gagcagcggc atgagggaga tggagctcgg gtaccatcag ggtanggatt tcaacttcca 300  
gatgccgttc accttcggc tgcagcccag ccacccaac ttgcangaag acaagtaggc 360  
catcgaatcc tgccgtggcc tgtgtgaact gaagctctc tacctgcagg ccacaactgc 420  
tagcttcaat tt 432

<210> 7237  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-019-Q1-E1-H12  
  
<400> 7237

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gctcgccac cctgctgtag gcgccttcat cagcacagc ggctggaact ccacggtgga 120  
agccgtgtcg gacggcgtgc cgatgatatg cctctcgttg cacggagacc agttcagcaa 180  
cgccaggtac gtgtgcatg tctggaaggt cggagtggag atcgaggcgt cgtctgctgc 240

tgggcagaac ctggagagag ggaagatcaa ggctgccatc gacaagattg tgcacgacaa 300  
 agggattaga gagaggatgg atgccttcaa attaactgca gatgaagcag ttaactccca 360  
 aactgaggtg aaagctttgg ttgatctcat aaactcgttt taattaattc agaaccttcc 420  
 acttcagata cct 433

<210> 7238  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-019-Q1-E1-H4  
 <400> 7238

ggtcgacggg gatgttgaac ccatccggta aagaaggctt ttgaagcgtt tgaaaaggcg 60  
 gacgtccggg tagggaagtc aaaacccaca ggcaacattg gaacgggtatt gcattccttc 120  
 atcatcaagt gccctggctc caaacagcaa acgagagaga aagtgatcgc tgcaatgtct 180  
 cgcgccatga gctcagtgtg nagtcgggtg angggagtcg gtgcagtaga ggttggttac 240  
 tctgctggtg gcatccaagt agcaagcagc cctgaaacc ttccattctg ttgatagaag 300  
 ttgtaggtcg agacagcaag ctgagatttc tgacttagca atgcaagaaa agcacaagct 360  
 aaaccgccat tgttgtaacg gtaggttctt gtgctccttg tagttttgat gtttttttgg 420  
 gaagaaatac atgc 434

<210> 7239  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-019-Q1-E1-H6  
 <400> 7239

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 ttttttttgg gagagcagtt tccgtgattc tgcttggtcg aaaaaataga aatgaatgta 120  
 tttaaaacta aaatacgtct agatacatct atttctccga tggctaacac tccacttcat 180  
 gatacatgga ctogtgtttt taagaaaata aaaaagagta gcaaataatc cggcgtgacg 240

agacggaggg cgagcgtatg gccgacaact tggctgctct tttgaggaag ggacgatggt 300  
gtccagacag cggttgcttg ggagcttgca aggcctgtgt ttggctccta cgccgagttc 360  
agtgccctgc aggttcaagg taactctgac atccttgac g 401

<210> 7240  
<211> 360  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-019-Q1-E1-H8  
  
<400> 7240

ggaagttgag aagctgattg gcaggatagt gaagtggctg aagcccgggtg ggcatatattt 60  
catcagggaa tcgtgcttcc accagtctgg ggattccaag aggaaagtga acccgacgca 120  
ctaccgggag ccgaggttct acaccaaggt gtttaaggaa tgccactcct atgaccaaga 180  
ggggaattcc tttgagcttt ctctggtaac ttccaagtgc attggagctt atgtgaaaag 240  
caagaagaac cagaaccaga tatgttggct gtgggagaag gtcaagtgca cagaagacaa 300  
aggctttcag agattcctgg acaatgtgca gtacaaatcc actggaatct tgcgttatga 360

<210> 7241  
<211> 462  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-A4  
  
<400> 7241

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aattacaagt gcgtactatc gagggggcgt cggtgcgctt gtcgtgtacg atgtgacacg 120  
ccatgtgacc tttgagaacg tggagaggtg gttgaaggag ctccgggatc acacagatgc 180  
aaacattgtc atcatgcttg tcggcaacaa agctgatctc cgccatctta gggctgtatc 240  
agtggaggat gccaaggcct tcgctgagag ggaaagcacc ttctttatgg aaacatctgc 300  
gctggaggcc atgaatgttg agaacgcctt cactgagggt ctgactcaga tctaccgtgt 360  
ggtcagcaag aaggccctcg acataggcga tgaccctgct gctccanega gagggcanna 420  
catcaatgtt ggtggcaagg atgatgtctc tgctgtgaaa aa 462

<210> 7242  
 <211> 286  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-A5  
  
 <400> 7242

tcggtatgat gaatgctaca ccaggatcag gacggtgaat gttagcgcta ttcgtgataa 60  
 ttgtattagc atgtttggct ttcgcatgta ttctgatcga atgtggtctt ctcccgacgg 120  
 ctgcttcacg tgtgctcacc aacgaagttc aatgctagca tgcgtgtga agtggctcgc 180  
 acagcgacaa tccgatggtg ctgcataaga ctgggcaaga cctatcatat gctgaagtct 240  
 ttcagtactg tcacagattg ggtcagggtga atcagccggg cgctct 286

<210> 7243  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-A7  
  
 <400> 7243

ccggggccac gggggatatg agacaacata cagtgagacg ccagaagagg cgcaggcgga 60  
 ggaggattcg gggggtttca gcttgttctg aaactgcaag cttggatatc agccgactta 120  
 caccgggatg gtagcaggcc agcaagcagc acttgtactg aacttgtttt tgcattgtcta 180  
 gatggggaag tgattcttct ctgtgattct tgtatggcca ttgtgtataa tagaaacgtt 240  
 tgcattgcaac cacgggtctg gctgcatggg cttaaagagct aaacattgaac aaagaacaca 300  
 tctggagtat cctgtagcac acatggggaa aacacgtctc tatagtgaac ttgcgggtata 360  
 catgtctgtc 370

<210> 7244  
 <211> 319  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-B1  
  
 <400> 7244



gatttcagaa accagtcggt aagtcgatga gtcaaccaag agtttgtccg tgctaaataa 420  
gaaaacacaa gctccgttgt tacccgga tagtggaat 460

<210> 7247  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-C1  
  
<400> 7247

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caccgggcac caccgcaata aaccgggtcca ggtataaagg cgtgaatgcc agggacgaac 120  
cttcggatgg ctggaacgcc acgcccagct ccacttggtg atcgcggaac attccagca 180  
cctgttcatt gatcaggtca tgcaccgtca cattcacctg cgggtaacgt ggcggaata 240  
tcttaagaat cgggtggcagc aggttgcccg caaacgaagg catcgccgcc acggtgacgc 300  
ggccacgctg caggggtgaaa cgctgacgca gttcgtcttc ggcattgtcn cagtcggcaa 360  
tcaaccggcg cgccaacggc agcagcgatt caccttcagg cgtcagtgcg acgttgcggg 420  
tattgcggct gaacaggcgg ccgct 445

<210> 7248  
<211> 363  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-020-Q1-E1-C2  
  
<400> 7248

tccgagcca cggggtaccg cgaatgattc atcatactga ggaaatttag tctggcatca 60  
aattttatat ggtctgatgc tcagacacca atggaattgt tcaaatttta ccagtggtg 120  
atcattgtag gctccatttg ttatcaaaat acgctaatta gtgcgtgctc atacacaaaa 180  
ggaacagttc aagtcttgct gcctgctcag tcaatcgtga gttacagtaa aagctataaa 240  
tgtctagctt tgagctcagt ttagttttga aatgcataat tagcttttac attacatgtt 300  
tgaaagggtt ctcttctaatt ttatacttaa ataaaattgg agaaattctc atctcgctaa 360



aaa

363

<210> 7249  
<211> 467  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-C3  
  
<400> 7249

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tcgtgaatga ggagcggagt ccaactccctt gggaataacc cacctagcat ggaagataca 120  
aatagaccta gttgaaacat gagctgctcg agtatataaaa acagcatttc atttgaaggt 180  
ttggagtttg gcacatacaa atttaattgg gacggaaggt aaataccgca tataggaagg 240  
tatggtaggac tcatatggaa caactttgag gtttatggag tttggatgca caagcagtat 300  
tcctgcttag tataggtgaa ggctagcaaa agactgggaa gcgaccaact gagagagcga 360  
caatgctacg tcttgagctt gtgttggttt tccccgaaga ggagaggatg atgtagcaca 420  
gtagcgtagg tatttcgctc agtttttgag aaccaaggta tcaatcc 467

<210> 7250  
<211> 460  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-C4  
  
<400> 7250

cgctgcctg tacgggcccg aanattccga gtccacgggg gaatcgctac atcgcgccgc 60  
cgaacctggc ggagaagctg atcacgaagc ggctgtacgc ggaaggggcg gagggaaga 120  
actgggtgtg gcaactcgag ggggacctga tgctcaacga ctccgtcttc gccgacagcg 180  
ggggcccaaa ccagaggaag ttcgagaagg atgacctcat cccgccaag ccgggatcgt 240  
acgtcaccag gctcacgcac ttccgggct gcttgccgtg caagcccgcc aagccctgct 300  
aaaccttggt ggccccgcg gccggccgga cccgatccct tccgaatctt caattctata 360  
gctttgttca agtcttttac tcaaagattc gtgtatgtat tactatgaca tttgagtagt 420

ctacgggggtt cagatcatag ggccctgtag gttgttcctg 460

<210> 7251  
<211> 459  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-C7  
  
<400> 7251

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atctgttcgt tcagcaacag tggacacttt ggcggtctga attgcgacca gaaaagcttc 120  
tctgttgcag gcccttcttt cgcttggaag aaccgcgcct catcagagac actcttcggc 180  
aagtccaaga atgcatctgg agaactccac ttttgattaa gcggggcata ctccggatca 240  
acgaatttag tctgtaataa gaaaggctta ccggccgcta tctcccagc ttgcgggatac 300  
ttctctcgag ccgccctaga cacggatcat gcttctctog cctcttgtaa ggccttgctg 360  
agatcgacct ttttggcttt gttatccttc tcgaggaatt cgcaccggac agtggtcttc 420  
ttttgctcgc gcgccatggt agacattctc tctctgcac 459

<210> 7252  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-020-Q1-E1-C8  
  
<400> 7252

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ttatggcgat ggcattcaca catggccatc accaccttgc tgcgggtgac gcaacttacc 120  
gaacaacaat tcttttctcc atctctctgt acgcagctcg acgacgatgg agacacgcac 180  
cagcagctag cagcatcgcg ccgccacctc cgtccacctt gtgcgggcca cctccacctc 240  
acatggattt cgcggtgccc ccgcgctcgc cttggatcga caaggctctg ataccaattg 300  
ttggcgccgc ctctctcgtg tgcagcgccg ctcttcttcc tacctcaagc tgccttacac 360  
aactctcttg aggtttctct caagaacaca agaatacaca cacacacaag aaactctaca 420  
cacacgcacc aaggaagaag cccaactacc tt 452

<210> 7253  
 <211> 489  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-D1  
  
 <400> 7253

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 caccaccac ccattctcgtc gccaatgtgg agaacctaac caaagtcctc gcaagcggat 120  
 ccgacgacac cgatgacatg gacgaggagg tcagtgaagt ctcggcccg ctcgaaacaa 180  
 ccaccacacc aacgaggaag tggatgacaa cctccacctc cgacatctac gtggtagata 240  
 ctccccacga caacagtggc agaggcgata atgataacaa tggccggggg aggcaacgg 300  
 agcaataacg gtgggaatga taacatggca ccaatgccaa caacccaac aacaacctg 360  
 gtcccgatca caaggacacc ttaaacaagt cacttggcag tccaaccac gatgcattaa 420  
 agctaaggct gctcgacacc gccacaaga taaccgatga aaagcaacga cttcgtgaca 480  
 aagagaaat 489

<210> 7254  
 <211> 311  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-020-Q1-E1-D3  
  
 <400> 7254

tccacggggt ggccaagaac ttcgattgcc atggccagggt tggcgaggaa gcttgtgcgt 60  
 tgaagagtgg aaggagctgt taaagctttt tctttcggca gttggcttat tatgctctgg 120  
 ttccttgcaa aaaaaaagaa aaggcttatt atgctctgga gctgtcttgc atttttcctt 180  
 cttgcaatgc tgcgttagcg gtatgtaatc ctgtaaccat attttgagta ctctctgggt 240  
 tttcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaacag 300  
 acgaacaaaa a 311

<210> 7255

<211> 385  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-D4  
  
 <400> 7255

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 cattgagctt tcctgaaata tttatcttga aatagcatta gctcaataag ctatatgttg 120  
 ttaggaatta ccaaaccac ctagggatag ttgcactttc aatactctat gtgcttcact 180  
 tatacttttt gagcttgata gtttttgctc tagtgcttca cttatatctt ttagagcgcg 240  
 gcggtggctt aattttgaag aaatttctag tctctcatgc ttcacttata ttattttgag 300  
 agtcttttag aacagcatgg tatttgctat gggtataaaa ttggtcctag aatggtaggc 360  
 atccaaattg ggtaaaataa aaact 385

<210> 7256  
 <211> 478  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-020-Q1-E1-D8  
  
 <400> 7256

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 aatattgtga caactatttg atccaccgga agtttcatga ggttttactc tgtgtgatta 120  
 agatggcagc agattacctc aaacctaagg acccaaactt tagtgtgcac ccaaagattc 180  
 gaaaggatag aagggttat ccccatctta aggattgcag tggtgacta gatggtactc 240  
 atgtcagagc ttctattcct gttgacgacc aagttagata cattggaagg tcaggatcaa 300  
 caactctgaa tgttctggca atatgtgatt ttgacatgaa tttcatgtac acctcagttg 360  
 gtcaacctgg ttttatgcat gatacatgtg tcttgatca tgcaattgaa gctgatanag 420  
 atacctccc tcacctccg aagggttagt agttcctata ataattttgt tactcaaa 478

<210> 7257  
 <211> 491  
 <212> DNA

<213>      Triticum aestivum

<223>      unsure at all n locations

<223>      Clone ID: LIB104-020-Q1-E1-E1

<400>      7257

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gcacgagaat ttcattggaat gagcagtcag ttagtcaagg caatgccgag tcttattttt  120
acaaaagtcc aggaagacaa ttgtacttcg ccaacatgtg ccatttgctt ggaagactac  180
agtgttggtg aaaagataag ggtgctgcct tgtcgtcaca agttccatgc tgcttgctgtg  240
gacctgtggc tcacatcatg gaggacattc tgccctgtat gcaagcgaga tgcaaagtct  300
ggaatgtcaa atttcctcc atcagagtct acccctttgc tttcttctgc tattcccttg  360
ccagctgaat ccacaacttt gtcttctttt cgttcaatgg tagcagcatc tcctccaagg  420
acaataagcc ggcaccttc atggcagtc atgtcccgca ctaactcaa ttccagtatc  480
ctcacatccc g                                     491
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<210>      7258

<211>      400

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-020-Q1-E1-E10

<400>      7258

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cgggtcacgg gaggcgggtca cggtacaaaa agcgcgacga cgacgacgat gatgacagga   60
agccgcggta caagaagcac gacgacgacg atgatgacca cgagaggagg ccgcggtaca  120
agaaacgtga cgacgacgac gatgatgacg atgacagaag gccacgttac aagaagcgct  180
acgacgacga cgacgatgat gatacgaagc caggttaca gaagcacgat gatgatgatg  240
acgacgacga tgataggaag cagcgtcgcg ggaacaatcg ccgccgccac gatgacgatg  300
actgattatg acatgacttt acgctgacgc taataagcat aattgcggcg gctttgcac  360
gagtaattac gacatttcac atttttttca aagcattttt                                     400
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<210>      7259

<211>      472

<212>      DNA

<213>      Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-020-Q1-E1-E7

<400> 7259

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cggcagcctt ggacaagcca acaatccctt cgaaacgaac gaccctttcg ccatgtccaa 120  
cagctttgag ccccttcca acatccggct ggcaatggtg acccagcagc agcaatactt 180  
ccaggctcaa caacatcagc agcaatacta ctaccagcct cagctccaat actaccagcc 240  
ccagctgcag cagcagcatc agcagcagta tttccaggct cagcagcatc agcaccagta 300  
tttccagcag cagccccagt attgtgtgca tccggccgga acttacaatc cgtttgggtga 360  
ccctttcact gaccttgtaa ctctgggtgc tccttcaaaa caaggcgatt taagtttgct 420  
ctgaattgcc cggccctgtt tctgatctca gtcaatatag atgggtactc cc 472

<210> 7260  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-E9

<400> 7260

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gaagccgcgg tacaagaagc acgacgacga cgatgatgac cagcagagga ggccgcggta 120  
caagaaacgt gacgacgacg acgatgatga cgatgacaga aagccacgtt acaagaagcg 180  
ctacgacgac gacgacgatg atgataggaa gccacgttac aagaagcacg atgatgatga 240  
tgacgacgac gatgatagga agcagcgtcg cggaacaac cgccgccgcc acgatgacga 300  
tgactgatta tgacatgagt ttaagctgac gctaataagc atagttgcgg cggctttgca 360  
tcgatgaatt acgacatttc actttttttc caagcatttt tcatttcgct gttcactggg 420  
caccatgcct ccaatcgtat gc 442

<210> 7261  
<211> 433  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-F5

<400> 7261

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acggcgaggg ccacaaggac gacgacggcc acggcagcag cagcagcgac agcgacagcg 120  
actgagccag ctccggccgc gctccggcag cagcgtgcag tgtaggcgag atcgatgaac 180  
gcttgggaga agtgtggcat acatatatgt tgcagggttt ggagcgtgtg gtagcatatg 240  
tatgtaatgc gtgacatgtc tcatggatct tgtgatgtat aataattagc cggctgcact 300  
gcactgcacg gtgcttgtaa taataacggt aatgaatcat gttggtattg atgcatctcc 360  
gttggttaatt tggatatccc atgtttttta aaaaaggcca caacagataa ccaataaagg 420  
ggccgcccta aag 433

<210> 7262

<211> 217

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-020-Q1-E1-G1

<400> 7262

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attttgttct tactttctgt atanatgtgg ntttgtgttt taattaatgt ttgtgccaag 120  
taaaacctat aggataagct atgatgatag ttaatttgat tctgctgaaa aacagaaact 180  
ctgcactcac gagaaaaaat taaattaatc acaggaa 217

<210> 7263

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-G2

<400> 7263

ctgctgtacg gtccgagaat tccgagtcga cgggttgacg aggagggacg gcgggacgag 60  
ctgggttcgcc gacaatctca acaggggcca tcttgattac ttctacctgc tctcgtctgc 120  
tctcagcgcg ctggagcttc ttgctttcct ctacttctcg gcgaattaca ttacaagag 180

aaagcttgct aatgttcact gaccgagact aatacatccg tctatgtact atggatttgt 240  
ggccaggtat acagtacaat tgcagtttagc atcagtaaag ttatacgagt acgctgacga 300  
ccgacctca gattttttttt ctttttttga aaaaaaaaaa aaaaaagaag aaagaaaaaa 360  
aaaaaaaaaa gaagaagaaa aaaaaaagga aaaaaaggaa aaggaaaaaa aaaaaaaaag 420  
gggccgccct aaa 433

<210> 7264  
<211> 320  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-G3

<400> 7264

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ctcggttact ctggtggcaa ccctgattgc gtccatcgcg ttcgtctcca ttttcaacct 120  
gccaggccag tactaccagg acactagcag cgggggagag atcggggagg cctacatata 180  
caagctcacc ggggttcgcg tgttctgect cctgaacgcc atcgccctct tcatctcgct 240  
cgcggtggtg gtggtgcaga ttacgtggt cccctgggga gaccggcgcg cagaagcaga 300  
tcatcaagat tgtgaacaag 320

<210> 7265  
<211> 448  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-G9

<400> 7265

ctgcagtacg gtcttagact cccgggtcga cggagagagg ctaacaatga tggagggtg 60  
agagtgcata taatccatgg actcaacatt agtcataaag aactcacaca cttattgcaa 120  
aaatttatta gttatcgaaa caaagtacta cgcgcatgct cctaggggga tatattggtg 180  
ggaaaacacc atcgctcgct cccgaccacc actcataagg aagacaatca ataaataaat 240  
catgctctga cttcatcaca taacggttca ccatacatgc atgctacggg aatcacaaac 300  
tccaacacaa gtatttctca aattcaaaac tactcaacta gcatgactaa tataacaaca 360



tcctcaaaac ccaaaacaat catcaagtat caaacttctc ataataattca atgcactttt 420  
tatgatagtt tttatttata ccatcttg 448

<210> 7266  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-020-Q1-E1-H11  
  
<400> 7266

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cgccgcgcgc tcaaggacac cctcaactgg gccgtccacc gccacctctt ctaccaggac 120  
gcggtccgagc tcagggacaa gttcgaggcc aacagaaatg tggagaacct ggacgtgatc 180  
gatagggtca tcgaggacgc ggagycgcag cagaggaact tccagcaccg ggatccttac 240  
attgttccat gggtccttg tggcactaaa ttcacaagga accctcctcc acctgaaggg 300  
attgagatta tctacaacta tggcaaagaa gaccaatgaa caagaatcat gcatttgtga 360  
gcagagcctg gcaccggcgg agtgcagagg acttactttt gcttttccag attataacat 420  
gcaactgagc tgctggtatg ttaagaac 448

<210> 7267  
<211> 319  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-020-Q1-E1-H4  
  
<400> 7267

cgacgggagg cgctggtgga gcaggagggg ctcttctggt tcgggagctt ctggggcccg 60  
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gtagtcttag agagagtgcg cgattaggca ccgacgacga tgcagtttga tgcaagcggc 180  
ttgcattgca gcttctagat gaggtttcta cttttccatc cgggcatcat tcggtcattg 240  
cactgatgat tccattcctt actgtacata tggtatcatc atggtacgcc tatcaatcaa 300  
agggacaatc ctgaacaat 319

<210> 7268  
 <211> 473  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-020-Q1-E1-H6

<400> 7268

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 ccctctgcga aggggctatc ttttattctt gtcttttacc ttatgcaaga gttatgggtga 180  
 tcttcacctt ttccttttta catttatcct ttggcaagca cattgtgttg gaaagattct 240  
 gatatatata tatatatcca attggatgta aggcacatg agctattatt gttgacatta 300  
 cccttgagggt aaaagggttg gaggtgaatc tataagcccc tatctttctc tgtgtctgat 360  
 taaaactttg aaccataaaa tatcgctga gtgtagcaa ttgtgaaaga ctaaagata 420  
 gttgagtaaa tggagtttgc taaatcaaag ctctgacata aactcctcct gaa 473

<210> 7269  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-021-Q1-E1-A1

<400> 7269

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 gaaaagatgg gtggaaaagg ttcgtcagaa agctgttaca gcttctcaag gacgagaaag 120  
 acgtgcactt cacctacggg agcgtccggc agaacgggat caggcgcgcc accaaaggca 180  
 tggcatcgtc caagttttgc ctgaacatcg ccggcgacac gccctcctcg aaccgcctct 240  
 tcgacgccat cgtcagccac tgcgtccccg tcataatcag cgacgagatc gagctccctt 300  
 tcgaggacgt cctcgactac tcggagttct gcgtgttcgt ccgtgcgtcg gatgctgtga 360  
 ggcaaggctc cctgctgcgc attctccgan gcgtgaccag ggaccagtgg actaccatgt 420  
 ggagaaggct gaangangtg gotcatcact ttgagta 457

<210> 7270

<211> 53  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-A11

<400> 7270

cgtagcggtgc tccccagcag gcgtccaccg gtcggggcgtc tcatacctgtt gtg 53

<210> 7271  
<211> 341  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-A12

<400> 7271

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gttccaatct caccatttta ttgattgag atgagagagg ggtcagggtg cacgcggtgg 120  
ctgttcgtgg ttgctgtctg cttatgtact gtgcaatttt attttttatt tttttggaga 180  
tagttgtctg tctgtgctag aaggagggat gaacagagga gaaacaggac agggctgggt 240  
gttgtctgca cacagagata ttgagataat tggactatt gttgtaaaat gttttaatgg 300  
aaaaaaaaat cctccattcc cttgcaaata agtttggttt a 341

<210> 7272  
<211> 458  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-A2

<400> 7272

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tggcgttggg gtttttcaaa tgaaaccgt gatcagaaag tcaccaacgg agccatacaa 180  
tctatctagt agtgtgccat ggcacggtac tccgcttcgg caatggaagg agcaactgtc 240  
tattgcttta tctcatcaa gatagtgtct cgtctcccca taaaatagat aagcctgtag 300  
ttgagcacct atctgaaggc ccaatcggca tcagtagttg cacgcaactc taaagaagac 360

gatgatggaa aaaaggacgg ctcgagaaaa ggtacctcga atatatctaa gaatctgatg 420  
aactgctgca aagtgaactg accggggggc agccatgg 458

<210> 7273  
<211> 479  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-A5  
<400> 7273

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actcacatga tttcaaaatt attggcatac tctatgtgct tcacttatat cttatgtgcg 120  
atataggttt tgctctagtg cttcacttat atcttttaga gcatggtggt ggatttggtt 180  
tatagaaact attgttctct catgcttcac ttatattatt ttgagagtcc tttagaacaa 240  
tatggcaata ataaaaactt tcatacaagt gcattgaata ttatgagaag tttgatactt 300  
gataatcggt ttgagatatg gagacggtga tattagagtc atgctagtgt agtagttgtg 360  
aatttgagaa atacttgtgt tgaagtttgt gattcctgta gcatgcacgt atggtgaacc 420  
gttatgtgat gaagtcagag catgatttat ttattgattg tcttccttat gagtggcag 479

<210> 7274  
<211> 422  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-A7  
<400> 7274

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gtgaggaagg gacacctagt aagagcaaat tccaattgaa actcagagat ctccggagaa 120  
gcacttcctc gtttgcttta ttggacagga attatctcac tcccattttt acctctcaac 180  
acgaggacga tgatgacgat gacgacaacg acgatgattc ttgtgaagtg ttggcgatac 240  
ccaggcccag cgcttagatg ttgggaaggc tatagctaata gactgcaagc acaaagtgac 300  
cgggtttttg cggatttaca cgaagaagct ctcagggctg gtaccagttc tgggttcgtc 360  
ggagttttga caaaaactgt tctgtctgcg ttgagataag ctcttctgat ttcttctgat 420

<210> 7275  
 <211> 241  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-021-Q1-E1-A8  
  
 <400> 7275

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 agactaggaa ggatgggaca tcaacatctt ccatacacta gttgcaatgc agatatacacc 120  
 ggtaacgtat atccgcgtct gcctcagtag tgaagcatca tcaatccgca tgtttactac 180  
 acatcagtaa ggtgttttag actatgacga caacgacgat gattcatgta aactgttgcg 240  
 t 241

<210> 7276  
 <211> 391  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-021-Q1-E1-B1  
  
 <400> 7276

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 gagagtcaaa aggagaagct gaaggtcgat cacatgttag aggatcaciaa aaaaggggtg 120  
 taccccaatt gcgaagatgg caacacaaag ctccgggacca tactggaatt gctgcagtgg 180  
 aaatcagaga atgctgtgcc tgacaaagga tttgagaagc tactgaaaat attgaagaag 240  
 aagcttccaa aggataacga attgcccgcac agtatgtatg cagcaaagaa ggtcgtatgc 300  
 cctctaggat tggagctgca gaagatacat gcatgcccta atgactgcat cctctaacgc 360  
 gatacgtacg aggatttgaa ccatgcccgg t 391

<210> 7277  
 <211> 423  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-021-Q1-E1-B10

<400> 7277

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cattgttgta tcgcgacctg aatgaaataa acgaaataat gctcttggtc aatcgtcagc 120  
ctccggttca agtactgcac caagctgtta ttttttacct ttttgaaaag aagcacgtgt 180  
tgctgtgttt attttatatt tttatctaag gatccagaca tctacaaaca caccagtgta 240  
accaccaa at ggtcatatac ccctaaaacc cctttgcggg gcaagggcca aaataattaa 300  
ttcaaccaat taataagggc ctccttcaag gttaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
aaaaaaaaaa attaaaaaaa aaaaaagaaa aaaaaaaaaa aaacggggcg tccaaaggat 420  
tca 423

<210> 7278

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-B11

<400> 7278

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ccgcaagtgg acgtgcatcg gcatcgcat cctgctcgtc gtcacacctca tcatcgctcat 120  
ccccatcgty ctcaagaaca ccaacaagag caacaacaac aacaaccagc agtagtagga 180  
atagcttgty atgatatgat cctggcttgc ttgcatgctt gctgggtgtt gttgatcggt 240  
ttttgtggaa ttttttgcga ttgtaattac tccatccgtg cggttcgttg agccaatcga 300  
ttatgttata taactatata cttttcggcg attaaaaaaa aataaaaaaa aatagggaaa 360  
aaattttattg aattaataga taaaattgaa aagattttta aaaattaagg aggagtaaat 420  
aaaaa 425

<210> 7279

<211> 288

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-B12

<400> 7279

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aagaccatga cccgaagagg gacgtggacg ttggcacggt ttctatccgc ggtttccatc 120  
ctgggccaag ctggccttgg atcgctcccg ctgtagaaga gccgccgtag agattgatgt 180  
ggtcagattg ccccaacgaa gttactgggt ttacaactac taccatcagt actgctgcta 240  
tgtgcaaagc tccatgcatg atttccaaac ttgaattaag ctttttttc 288

<210> 7280  
<211> 463  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-B2  
<400> 7280

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ctcaaggcgg aggcgacgac ggacaacaag ggggtgtaca agatcgagat cgatcaggac 120  
caccaggacg agatctgca ggtggtgctg accaagagcc ccgacgcgtc gtgcgccgag 180  
atcgaggagt tccgcgaccg cgcgcgcgtc ccgctcacca gcaacaacgg catgaagcag 240  
cagggcaccg gtttcgcaa ccccatcgcc ttcttcccca aggagccgcg caaggagtgc 300  
ggcggcaccc tccaggctta cgacctcaag gacgcacccg agaacccatg aacccccatc 360  
ccatccatat agtctcgctc agttgcttcc catcatcatc atcatcatc tctcctcatg 420  
actctcctac gtacggtgcc cttgcctagc tacttctgtt cca 463

<210> 7281  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-B4  
<400> 7281

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gaggcgatcg ccgccgcgtc taagacgatc aaggacgcgc tggagaaggg cggcgccgcc 120  
gacgacgcca tcccggtccc cgacgtcacc ggccgagtc tctcccgct cctcgagtac 180  
gtcagcaggc acttctccga cccggccgcg gccgccgacc cgttcgacta catccccaac 240

ttcgacaacc cgctcaaggc cttegacgac gccttcgtcc aggtcgacca ggacacgctc 300  
 ttcgacctca tccacgcggc cgagtgcctc gacattgagg ggctgatgga cctggcggtg 360  
 aagacggtgg cggaccagat gaggggcaag accatcgagg agatccgcaa aaagttccac 420  
 gtcgtcaacg actacacgc ac 442

<210> 7282  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-B5  
 <400> 7282

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 ctgctatacc ttctgtgag tgactgcagg gtaactacga tagaactcaa cgcacccaag 120  
 ctccaaacct ttatattcca agggaggctg gtgcctattc accttggcga atcttcagaa 180  
 ctgcacaata ttgttattca ttcttataca ctaacactag agcaagctat ttgttcattt 240  
 gctgatgcgt atccactagt gcaacgcctg actctgtgtc acacttgtgc actaccgaag 300  
 ttcccctggc gattggacaa tactttctagc ttttctcatt tgagatattt acaactgttg 360  
 ttgaatatct tctctgaaca tgccaacgac attctctcta ttgcatattt tctagaggct 420  
 gctocattcc ttcaggagtt tgatttggag t 451

<210> 7283  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-C11  
 <400> 7283

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 tgtacatgag gacggcaaga tctgtgtgac catctttttc aacacctgta cattggatct 180  
 tggaggacca atcagtatga acgcgtcgtg tcatcattcc tcttggctta cattatgccc 240  
 agacatgcaa agttgtggat cgtctgtaag ctaccatttg ctttcgtatg tcctatgtct 300



gtgatatttg caactaaacc tattgtgcta cgtgctttct atgttcgtac attgttaggt 360  
ggctccttat tgtgtgcata c 381

<210> 7284  
<211> 365  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-021-Q1-E1-C12

<400> 7284

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tggggatgca tccgacgaac ttgttgtttg cgaagacgac gacggaggcg gtggagttgc 180  
cgatggtctc cgggatgggg ccgacgaagc ggttgctgtt gacgaagatg gcgtcgtatg 240  
gcttgctgaa gagcgcgggc ggcagctcgc cctcgaactc gttgaagcgg atgtcgtatg 300  
acttgagcgt gggcatctcg aggcagacgt angggacagg gccgacgaag cgtttgttgc 360  
tgacg 365

<210> 7285  
<211> 301  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-C2

<400> 7285

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ggaaactctt caacacatct agagtatgga ccattcacac gccattggtc catcatgcag 180  
tatccgcgct tgggactgga acttcagctc acccgtgcat tataggcccg accagtcagt 240  
acaatatcct accataacac gtgacgacac caccgggtca ttactctaac cctttggtta 300  
a 301

<210> 7286  
<211> 462

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-C9  
 <400> 7286

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 aggtgagggg gatggagtcg atagaatccc taaggaaagc tttttgcaag cagatcaaac 120  
 aaactggagg ggtggcgctc catgctcggg agggtaggca gtcgatgatc ttattaggga 180  
 tgggagttgg tagttgggac ccaggatcgt ttatgggctg tgtgggctga ctaggcccg 240  
 ttcttgcttt gcctatcttc caatgcttct gtgtgcagaa ccatgtgcta ctttagtggt 300  
 tgtgcctaag atctattggt cacgaacccc aaccttcgat ttgccgaacc ctgatctctg 360  
 atttgccgaa cccgaccttc gattcgctga accccaatct ctgatttgag atctgccaaa 420  
 cctgaccttt gattcgccaa atcccgatct ctgattcgcc aa 462

<210> 7287  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-D1  
 <400> 7287

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 gttaagtgtt cgaaagcaac ttgaagaatt tgaatttcct tgcaaagctg taaacgatgg 180  
 tctttggctc cagatgctcc tgtgccacag agtgcaagca atagttgctg atacttgacg 240  
 aaactgttgc cttacaagta attcttgctg ttgtaaacaa gcatatgttg gtacacacag 300  
 ccactacagg caggagcatg ataggacaag tgcttcagga actgcaggta gtatctacct 360  
 tgcagatgcc caaggcgatg ggaatggtat gtttagtcct gtgcgtgtta acgtaagagg 420  
 agcagttgat ggacttgctg gcattggg 448

<210> 7288  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-021-Q1-E1-D10

<400> 7288

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cctagggaga agatcacaag atggaatgag ctcttggaag ctgcaaggga gggttagttg 180
aagggccaca catatgcatc tgacggagct gctggttcat gcgtaaactg aatcaaagaa 240
acaaactacg agggacaatc tgaatactga cacaacagaa agaaagtcaa gtgctaattg 300
gtcttagcaa tgaatcatgc gtaccaatac tggttaaaat cccaaaaggc tcgatcactg 360
aagccacatg aaactactgt attcgtgaga tgcanctcgt ctaaatacatg ggcattcctt 420
tggaaaaaaa aa 432
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<210> 7289  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-D12

<400> 7289

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gctcgtagag tgcggtgga gggatgacat gaaggctctc tgcagggtt atgcaaggaa 180
aaagggaaga aataatgtaa cattagatga tcttattcat gttattactc caaaaggaag 240
agcctcgggtg cccgatgcgg tgaaggcaga gctgctgcag cgcacccgat cctttctcat 300
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gaagcatcga tcttgaacgc gtgacact 388
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<210> 7290  
 <211> 303  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-D2

<400> 7290

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caatgatatg catgatagcc aaatgcacct ctacctatgc gtctagacga gacatactag 180  
gtacttggga ttcccttttc agtagtaaat atatcgtcgc agcgagcgta ttccaaaata 240  
tattaacggc acctcgagtc gcagaccaat gagcagtgca ctgatacaat catctcaa 300  
atc 303

<210> 7291

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-D3

<400> 7291

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tcattaggag aattaatgat gtgatggaca tgacccatcc cttagcttag cattaagatc 120  
actacagttt cattgctact gttttcttca tgcttataca tgttcctcgg actatgagat 180  
catgcaactc ccgaataccg gaggaacacc ttgtgtgcta tcaaacgtcg caacgtaa 240  
gggtgattat aaagatgctc catagggtgc tccgaagggtg tttgttgggt tggcatagat 300  
cgagattagg atttgtcact ccgtgtttcg gagaggatc tctgggcccgc ctgcgtaata 360  
ctcatcacta taagccttgc aagcattgtg actaatgagt tagttttggg atgaagtatt 420  
acggaccgag taaagagact tgccggtaac ga 452

<210> 7292

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-D4

<400> 7292

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tggaactttt gcacataatt attaaagata gattttcgtg ccatgcgtaa accaagctgc 120

tgagagtcta cccagccac aagggggagc tgctccagta gttcaggata cccacccag 180  
 cccacaagg gttgacggac cccctaccta tacctatacc tgatgattac ctatacctga 240  
 tgattttcaa tccacagctc attttcttga atatgtgaca agccttgcaa attgtgataa 300  
 tatgtatcaa attagtggtc cgcataaccc aatatttgaa aattatggag gtgcaggccc 360  
 aagtacttcg aatcatcaac aagaaatcca agaaagaaca gcgaaggaaa aacgtgacaa 420  
 gaaaagtgtt ttctcgactc gagatgtt 448

<210> 7293  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-E1

<400> 7293

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 atgaacgccc gagtagcgat tattaaatga gcaaaggctc aaggaatatg aagaaacttc 180  
 tatggattac tacgatttga gagctgacaa tgggtgtaa at ggacaaaaaa taccagtgtg 240  
 attcacaatt tgacaagtgg tgaagccaag tccagggtcaa agcaatcgaa aacagaaaat 300  
 gttcagattt gggtacaact atagatctgg aaaatatttg aaaaagaaaa gaaaaaccta 360  
 ggtatggtgg agctgctagg tgaagaaacg gcaatggagt ccacttggtg caacaagagg 420  
 gatctaaaac gtgatcaatt t 441

<210> 7294  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-E10

<400> 7294

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 gaggagaggc tgggaaagct tggctatctc gttggaagcc agctaggcag ctgggttggg 120  
 ggaagaatcg gactgatggt ctatgatgtc atcaacgggt tgaactacat gcttgagttt 180

gtccgtccag aggagtatcg atcatcatct tacgcagcag aagagggctc agagtatgca 240  
gataactaca gaagttcgtc ttacgtatca gaagagggct cagagtatgc agataactac 300  
agaagtcgcg aaggatatga gccaacatac agtgagacgc cagaagaggc gcaggcggag 360  
gaggattcgg ggggtttcag cttgttctga aactgcaagc ttggatatca gccgac 416

<210> 7295  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-E11  
<400> 7295

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ttcccgctta gtatagggga aggctagcaa aagactggca agcgaccaac tgagagagcg 120  
acaacagtcg taaacatgca ttaaaattaa ttcacaccga gtacaagcat gagtaggata 180  
taatccacca tgaacataaa tatcatgaag gttatgttga tttcattcaa ctacatgtgt 240  
gaaacatgtg ccaagtcgag tcaactcaatt catttaaagg aggataccat cccatcatac 300  
cacatcataa tcattctaata aacatgttgg catgcaaggt aaaccattat aactcatagc 360  
taatcaagca tggcacaaga aactataatc tctaaatgtc attgcaaata tgtttacttc 420  
ataatagctg ac 432

<210> 7296  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-E4  
<400> 7296

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gaggtagtga tattaaaatc atgctaattg ggtgattatg aatttaaaga atgcttgtgt 120  
tgaagttagc aagtcctgta gcatgcacgt atgggttaaag ttgtgtaaca aatttgaagc 180  
atgaagtgta cctggcttgt gcatccttat gagtggcggg ctgggacgag cgatggtctt 240  
ttcctaccaa tctatccctt taggagcatg cgcgtagtgc ttgggttttg atgacttcca 300

aatttttata ataagtatat gaggctctttt gaccaatggt gaggccatgg attatatgca 360  
 cttttacctt tccatcattg ctaggctttt cggtagcgtg cattgccctt tctcaccttg 420  
 agagttggtg caaacttcgc cggtagcat 448

<210> 7297  
 <211> 197  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-E5  
 <400> 7297

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 atggaagtaa tgatattaat ctcatgcaaa ttgggtgatt atgacctgat acaaagcatg 120  
 gggtgaagtt tgcacgtccc gttacaggca cgtgtcgata aagttgtgtc acataattag 180  
 tgcataaagt gctacca 197

<210> 7298  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-E7  
 <400> 7298

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 gacggcgagc acaagaagga cggggagcac aaggaggga tgatggagaa gatcaaggac 120  
 aagatcagcg gcgacggcca cggcgacggc aagaaggacg gcgagcaca ggagaagaag 180  
 gacaagaaga agaaggacaa gaagcacggc gagggccaca aggacgacga cggccacggc 240  
 agcagcagca gcgacagca cagcgactga gccagctccg gccgcgtgca gtgcagggga 300  
 gatgaacgagc tgggttaatt tggagcgtgt ggtagcatat gtatgtaatg cttgacatgt 360  
 ctcatggatc ttgtaatgta ataaccgggt gcaactgcatg gtgcttgtaa taataacgtt 420  
 aatgaatttc cattgggaat ttggtaccat ccttaacaaa a 461

<210> 7299  
 <211> 182  
 <212> DNA





cgtagcagga gtcgtagcac tagtcctgat gattacaaga ggcgtggcag agacagaagt 180  
cctagtcgta gcaggagccg cagctacagt cctgatgatg acaggaaggg tggcagagac 240  
agtttgtcgc ccgcacgcag aagcactagt cgctcccctc gcaagacacc acctcctcgc 300  
aagacaccac ctccttgcca ggggtctcct gctaagcgca atgatgaccg ttctcctggt 360  
aggcgcaatg atgaccgttc tcctgttagg cgcaatgatg accgggtctcc aggctctcgt 420  
agcccttcaa catgagctga atgtcaaaca act 453

<210> 7302  
<211> 456  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-F2  
<400> 7302

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actggagcat gcgcatgtag ttcaaatttg aattatgcac ataaatgcat tgaaaactca 120  
cttaatgcat aaaaatttcc aaacaaaccc cgaaaaatca caaaaattca cacaacactc 180  
ctgttggttct atgttgacag gagaaaaaaa cttgaaagca ataagaggca atggatatcg 240  
tttcgtcccc aaaggtggga cgttccctac cgaaaacat catgcttggt gtgagaagct 300  
ccggtttgtg agaagcatat acccaaacct ccccaaatg ggaaacaatt tgtaccacgg 360  
catgttgatg ccgctccatg atagcatgcc aagtttcatg aatttcagat gagttttgga 420  
tttactagaa tttaaaaact aggcattctca ctgttt 456

<210> 7303  
<211> 376  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-021-Q1-E1-F3  
<400> 7303

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acggaatccg gaacaacatt cccaattccg gccaggtaaa ccggttgctg aaaacaaagc 120  
attgcactgc aatttggaat tggttaaccg agtgcattgc ccggtcaagc gtcgttgctg 180

cacgcagggg ctggccctgc atggattgat gtatTTTTac actcaagctc gcaatgtaac 240  
 accgacattt gttgttctct agcatctact actatacgtg attgcaacga acggaccaag 300  
 acatctgatg aacacttgtc atgtttccct gtcgaaaatc tttaatatat caggaagcgt 360  
 tgctgctctg catcta 376

<210> 7304  
 <211> 264  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-F9

<400> 7304

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 ctgctgctcc tcataagctc agcaagtcga gcagtgaatt ggatatactg aatacagaat 120  
 ttgtatacaa cagagcgtgt gttaatactt actgtttaat atacttgtca cagtttgagc 180  
 ttgttctaca atctcattag tcattacttc gtcagtgttt taggcgcatt tgatggatgt 240  
 taggttacia aaattgtatg aaaa 264

<210> 7305  
 <211> 343  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-G11

<400> 7305

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 tcagcaatcc gagtggcggc agcaatgaaa gtctccatga atgactggaa gtcgtgcttc 120  
 ttggtcttag caactttaat agcctcctcc tccactcccc acccggcgac caacccccgcg 180  
 atccggcgag cccgagatgg ggttcctggc gacctccgcc atcttcttcc tcgccggctt 240  
 catcgcatgc ctcttctcgc tcctctgctg caaccgcggc gcctccacca acatattcca 300  
 tttgacctg gtcatttacg ctacagtttg ttgttgatg atg 343

<210> 7306  
 <211> 464

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-021-Q1-E1-G12  
 <400> 7306

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gggattcttt cttgaccacg tcatcagtaa aaccggagaa taccatgtgg aaattgattt 120
caaatcctag ctaggggttt gtaattataa gagatcttat acatattgta catgtatgta 180
gccagtagcg tcggatacat gatacgaaaa cttgttggtc gaccaacctc tcggagaagg 240
agaggtcgat cgatcacttc tctcggtatg catgacgaac ttctgtactg aatgggttctc 300
tcgatcactt atgtatatat agtacgtagc gtccaagcac ggacataaga gaggacactt 360
ctctctatta attagctagc taacacaata tatganacac ctaattaaat taacccccca 420
acacccccaa cctcccctcc tttcaaaaana aaaacacaaa aacc 464
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<210> 7307  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-G4  
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tgtacttata cctggatgca tcggatgagc tccgtctcga gtccaagaag gtggttgtaa 120
tgactctgtc catcctggac caaaagaatg ggaaacactt gactgcaatt tcaggtctct 180
tggtgtttac ggggtggacgc ggctggggat ggggtgattt ccttggactc aagaatctga 240
aggacccggc gggaggctat gttgtgggat cgagctgcgt tgtgaaggcg gatctcacta 300
tcgttggttc atccaatgat ggtagatgt tcacctcatg gcctgatgga gagataatgc 360
ccttgcaccc tacttataac tagacttcta tttgagataa tggtgtagta gcactactaa 420
aaacttggtg gatgatttag tagtaatgag 450
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<210> 7308  
 <211> 361  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-021-Q1-E1-G5

<400>       7308

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ccacgacacg tggctggtgt gactctgtcc atcctggacc aagcgaatgc gaaatacttc  180
actggaattt cacgtcacct ggggttttac ggtggatgcc gctggggatg ggctgtattt  240
cctatgtctc agccatctga ctgacccgga cgcaggctat gtcgtgggat caatctgogt  300
tgttatggcc gatctcacta tcgttgcttc atcgagtgat agggagatgt tcacctcacg  360
g                                                                                   361
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<210>       7309

<211>       451

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-021-Q1-E1-G7

<400>       7309

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attgagacaa cgaatttcag ctatatagg agctgaacca tattaagtat gtgcatcctg  180
ggtggaatgc tttctgttca tgagctggcc tcccagcatg tactgttgag aaaagaaaag  240
aaggagactt tcaagttctt atgaaaagca agagagcttc taagttctac aactagagc  300
tggcgtagac gcgttctcag agctcatgtc cagggttca tcagagctat tttctatgct  360
ggaaacctaa aacaacaaag attttcaatc caccagact aatcaaaatt tgtctaaagt  420
ggaacggatg gtcgtcactt ttgactaagc t                                                                                   451
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<210>       7310

<211>       199

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-021-Q1-E1-G9

<400> 7310

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agtgtagtat gttgtcacca cgctgcatca gagcgtggtg agtggtgtat gttgtcggtc 180  
aggcaaaaag gagatgggg 199

<210> 7311

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-H1

<400> 7311

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ttgagacaac gaatttcagc tatattagga gctgaaccat attaagtatg tgcattctgc 180  
gtggaatgct ttctgttcat gagctggcct ccagcatgt gctgttgaga ttcgattcac 240  
tgggagcttt caagttctta tgaaaagcag gagagcttct aagttctaca cactatagct 300  
ggcgtacacg cgttctcatc gctcattggc atagcttcaa cagagctatt ttctatgctg 360  
gaaacctaaa acaacaaaga ttttcaatcc accagacta accaagattt gtctaaattg 420  
gaacgggtgg tc 432

<210> 7312

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-H2

<400> 7312

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gggtcaacta tttgtcatat agtaaatgac tagcaacgag catgtaaaaa cacattactc 180  
ccgagcatca tctctccgac taaaaaagaa gtggcaagct aatatttcaa aatttgattc 240

acatcgactt ggtaaggtat acatggatgc tcgttctccc aaattttgaa tgatctgtta 300  
 aacatcctct gctcgggtga attcactcga gcaaataaat gggagacgca aaattaccgt 360  
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 ccaaccgcgc cttctcctcg gccgaaatg 449

<210> 7313  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-021-Q1-E1-H3  
 <400> 7313

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 catgccattc cataccgcgt cagaaaacgt caagcaggtc aattcactgc acgtcactgg 180  
 acaacgtatt atacgctaaa gacggggaga tacctatctt aacccatctg gaacacattg 240  
 caggttacct acctttcgtc atacggctta acgccgaaca ggtctccatt gctaacattt 300  
 ccgaaaagtt aatgaccaa atgacccact gtgaagcgcc ccattaccgg ccatgaatct 360  
 catcgggtatt cacagttaca ccaaggggtca tcacaa 396

<210> 7314  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-021-Q1-E1-H4  
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 actagatgca cttacaagtc acccgggggat tcatggatgg atatacactt tggaccagac 180  
 acgatgaaga gccagtcatt gatggatata ccaggggctg cgacatgcca aatcccgatc 240  
 agagtcacat ggatgttgaa tctaacatca gggctgcggc atcaagctac caatagaata 300  
 ccgaaaagac aaaaacccca ctggaaaacc aagacggcga tgcagaaaat gacgacgacg 360

accttgatat gccagatddd gttgctatga ttgctgattt gcagggccca aaaaaagata 420  
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<210> 7315  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-H6

<400> 7315

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 gagcacaaga aggacgagga gcacaagaag gcggaggagc acaagaagaa ggacggggag 180  
 cacaagaagg acggcgagca caaggagggc atgatggaga agatcaagga caagatcagc 240  
 ggcgacggcc acggcgacgg caagaaggac ggcgaccaca aggagaagaa ggacaagaag 300  
 aagaagaagg acaagaagca cggcgagggc cacaaggacg acgacggcca cggcagcagc 360  
 agcagcgaca gcgacagcga ctgagccagc tccggccgcg ctccggcagc agcgtgcagt 420  
 gtaggcgaga tcgatgaa 438

<210> 7316  
 <211> 85  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-H8

<400> 7316

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<210> 7317  
 <211> 265  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-021-Q1-E1-H9

<400> 7317

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 gcaagatgaa cttactgggtg aagttccagt tgcattcatt gtgcggattg aaggctctga 180  
 gatcagcgag agcgagatca agcagttcgt tgcaaaagag gtcgttttct acaagaggat 240  
 ccacaaagtt ttcttctgctg actcg 265

<210> 7318  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-A3

<400> 7318

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 tccccagttc catccatta ttggttcttg cgaggatggg gcggagaaac ggaagcatga 180  
 agcggagagg agatcaggca gcccttcatg cacagagggc ggcgagggag ggcgcgatgg 240  
 cgtccaagag gatacagaag gtgctcaagg atctgcagta ggatcccccc acctcatgca 300  
 gtgcagggtca tgtgggtgaa catatgttcc actggcacgc aacaataatg ggcccatctg 360  
 acagcccata ttctggtgga cttttc 386

<210> 7319  
 <211> 169  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-B11

<400> 7319

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 tgctgtcgct ggggcagcgc ccgtcagaag aggagctgcg ggagatgatc gcggacgtgg 120  
 acaccgacgg caacggcgctc gtggaattct ccgagttcct gaacctcct 169

<210> 7320  
 <211> 453



<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 tcacagctgc aaataatgaa acagacatat tatgcaaagt ttgggtactta tcttgagcat 180  
 gacattagtc agcaagcatc cggcgatcat cagaagatct tactagccta tggtggcatt 240  
 ccacgctacg aaggcccgga ggttgatccc actatagtga cacatgatgc gaaggacctc 300  
 tacaaagctg gtgagaaaaa gctgggcaca gatgagaaaa cttcatccg catcttcact 360  
 gaacgcagct gggcacacat ggcagctggt gcttctgcnt tacatcacat gtatgatcgg 420  
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<210> 7321  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-B3  
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 atccatttat tttctatggc tcgccgatca tcgggcaagt cagtcaaagt ccatacttca 180  
 ttttcataca tgtatcctat cttggatttc atggcttcca gccatttgtc ggaatctggg 240  
 cccgccatcg cttcttcata gttegaaggt tcaccattgt ctaacaacat gatttccaag 300  
 acagggttgt cgtaccactc tggtgcgga cgtgtcctcg tggacctacg aagttcagta 360  
 gcaacttgat ctgaagtttc atgatcatca tcattaacgt cctctc 406

<210> 7322  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-B5

<400> 7322

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gaagaacaag aggaagaaga tgaagaagac gaagaagacg aagacgaaga agaagaagag 180  
gaagaagaag aagaagaaga agaagaagaa gaagaagaag aagaagaaga acaagaagaa 240  
gaagaagaag aagaagaaga cgaagacgaa gacgaagaag acgaagacga agaagacgac 300  
gaagaagacc aagaagacga agaagaagac gaagacgacg acgacgaaga agaagacgaa 360  
gacgaagaat aagaagaa 378

<210> 7323

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-C10

<400> 7323

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gagtcttcac gggggttgc tacttaattg actactcatt gatctttact tatcatcttt 180  
cggaatagtt tgttgtttgc tcaaatgatt cacttatatc ttttacagca cggcggggga 240  
tttagtttaa ggaaatggat gaactctcat gcttcactta tatatcttct agagtctga 300  
acagcatggt gatttgcttt gggatatgaat ttagtcccaa tatgatgggc atcgaagatg 360  
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gattgtttt 429

<210> 7324

<211> 138

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-C3

<400> 7324

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ggaaataaca atttacat 138

<210> 7325  
<211> 301  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-C5  
<400> 7325

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aaaaactcga caatttgtgc accagcaaag agggctcgga cgacatcggc atggcccagc 120  
tccccgaaat ccgcagcttc aacaagggga acaaccgggc ccaaggccaa ttggaattcc 180  
aaaaggttcc cccttgcaat tgccaggaga caaccgaca atttcccaag gagaaccaat 240  
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<210> 7326  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-C7  
<400> 7326

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cacacttcag tatcccagca tcaacaaacc tgatgcataa tcctgtgata ttaacatctg 120  
gccacactta cgaaataaaa tatattcaga aatgggttcac tgaaggatac aacacttgtc 180  
ccaagacaca ttaaaagcta taaaactttg cgatgattcc aaatacttgc atgagggatc 240  
tcatttgcaa ctggtgcaca gagcatggat tcacaatctc agattttctt ccaggcaaag 300  
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tttcagtacc tctaattgct gggaatgcc a ggaatttt 398

<210> , 7327

<211> 372  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-022-Q1-E1-C8  
  
 <400> 7327  
  
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 gacaacccgc agcaggcgcc caaggtgaac ttcgacgagc gcaccgggga gaagctggac 120  
 aacgcctact accacgagct gctggcgcgg cggggcctgc tgacctcgga caacacgctg 180  
 gccctgtaca cgcagacgag gccgctgggtg gagcagtacg ccaaggacga cgcgctgttc 240  
 catcagaggt tcggggagggc gatgcagaag gtgagcaagc tggacgtgat catcaagaag 300  
 aacaacgggc agatcaggcg ggactgccgg atggtgaaca aagccatcga ggtacgctgg 360  
 atgcccattcc ac 372

<210> 7328  
 <211> 238  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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 <400> 7328  
  
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 tcctgacact gtaaattccca gggtcgaaca gttcaagaag gatagcctca ccgtgcttgc 180  
 aaggctcagc aatgttccct cacacatggg gaaagaatgt acacagagaa tggcgaca 238

<210> 7329  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-022-Q1-E1-D2  
  
 <400> 7329  
  
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 gggccggccc ataaccaggc aacaagcgat attaaaaatg actcgaaaaa gaaatgcgca 120

cacaacagtt tcgaacacgc gacctcatgc ttactagcgg ccacgccaac aatctgacct 180  
agctcctgaa tatggccaat tgaagtgcaa attttaaagt acaatgtaca acgacaaatc 240  
aatTTTTTttc cttcaaaatt tccaataatt cttgcaaaca aatgtaaacy attttcctta 300  
aatatatttg aaaatcgtga ataaatatcg aaattcgaac aaacacttaa aacccgaaca 360  
attattgaaa acgtgaccac tattttgaaa ttccaattta ttatatacgt tattttttgt 420  
aaaatatata ttaaacaatt ttt 443

<210> 7330  
<211> 323  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-022-Q1-E1-D5  
<400> 7330

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tcaaacgggt caatcttcat gttccaagta aagtggatcat aagactttta aactgtgttt 120  
attgtcctat tgatgtatat gggtaaattt aagtctagag ttaaggatca taggttatgt 180  
aaatttatct attgtctcaa aagtgtctaa ctacagatgc tagataagta gcgagctttg 240  
gggcgtatct aatgtcgagg aacatagtaa agatgtcatt tgcacaagaa gacacacacc 300  
aatctcaagt tcagtttgca cat 323

<210> 7331  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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ggatgcaaga acagagggac aagatccaag tcacggtctg caaacacttc cataaggggg 120  
gcaatttttg caactagaag attagggggg aggtacagag agggaaatca actagttcta 180  
aaactaaaag aagttcatgg ccagaaaatt ttggaacaac accttttacc tttttgtttt 240

cacttgggaa acttgcccaa ctatgccaat ttttttttgc aattctccag atttattgcc 300  
 tggtcagcac ggagaattgc agacacattt gcgttttcaa aaaaatattc cccacgattt 360  
 tatgtcttga tttctcgtcc tttttactat gtttttcatt gtgcaaggag agcctcccaa 420  
 cgc 423

<210> 7332  
 <211> 203  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-E12  
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 atttgtgatg acaacatgtc ctcgggggag cactttctga acttccatgt gagccttcgc 120  
 caactcttca gggtttttca tgagctccga cataggccac accaaagtgg tcgatgagga 180  
 ttcactacca ggctccaaag tat 203

<210> 7333  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-E3  
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 gtaättatga aattgagaaa tacttggtgtt gaagttggca agtcccatag catgcacgta 180  
 tggtaaaagt tgtgtgacaa atttggtgca tgaggtgcta ttttaatggc ctaccctatg 240  
 agtggaggtc gggattgcgc gatggttaac tctaccaac cttccccta agatcatgcg 300  
 tagtagtact ttgcttcgag ggcaagtaga cttttgcaat aagtatatga gttctttatg 360  
 actaatgtga gtccatggat atacgcacac tcaactcttc actttgctag cctctattat 420  
 accatgcaac ttttcgcagt atcatgcat 449

<210> 7334

<211> 348  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-022-Q1-E1-E6  
  
 <400> 7334  
  
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 cctgttttgac aactttactt cgtatagtac attgaaacat gaactcagca agtgcaacac 120  
 cacacagtga tcaaattcgg cctggggcaa aggtatctcg ggaagaattg tactcagctt 180  
 tcggtcataa togatagccg ctagtggcat ggcaacattg acaaggacat cagcacttca 240  
 agttgagtgc catcaagtaa atgacagtgt acaattgctt cagtagatgg taaaactctg 300  
 cgtctcagtg atgacggatt tgggcacagt ccatttggtg atttaagt 348

<210> 7335  
 <211> 260  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-022-Q1-E1-E9  
  
 <400> 7335  
  
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 gctgagcagc gacgccatgg acgcgatgat tcgggagcag agcagcttct gtgaagaaat 120  
 aactaaacag gatcgggtgt cgacaatgtt gtggccgtgt gttgggtgtg attgtttgtt 180  
 tgttgactg gctgcattca ctgggtgggc accacgatct atacgataat gtgtacgttc 240  
 gtacgtactg tattcctgaa 260

<210> 7336  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-022-Q1-E1-F10  
  
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 ggatgtaacc taagcacttc cttgatgatc atctgtaagt aatggagttc accaagatta 120

gcatttgtga tgacaacacg tcctcgaggt agcactttct gaacttctat ttgagccttc 180  
gccatctcct cagggttttt catgagctcc gacatagccc acaccaaagt gggtcgatga 240  
agattcacta cgagctccag gtatgtccta gaaataagag tgcatgcata tgtggacata 300  
gataaaacag atagtaatta tgacaaggta aatagatgaa acatttacat cagaggtgat 360  
aaaataccta accaagggtc taccgacaat cgtagactta cgagagg 407

<210> 7337  
<211> 269  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-F12

<400> 7337

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catgatggca gcatgcgata cttcagatc tgggtgctgt gagcagctgc ggactcatgc 120  
tcgcaggctt cagataccta tatttgagaa gggatatgag aaggatccag cagttgtggc 180  
gaaagaagct atccaggaag ccaactgaaa caaatcagat gttgttcttg ttgatacggc 240  
tggccgtatg caggataatg agccactca 269

<210> 7338  
<211> 120  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-F2

<400> 7338

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<210> 7339  
<211> 248  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-F4

<400> 7339



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tgtgcacccc gacatcggtg tctcctccaa ggccatgtcc atcatgaact ctttcatcaa 180  
cgacatcttc tataagcccc ccggctaagc cgccaaactc gcccgctaca tcatcaaccc 240  
caccatta 248

<210> 7340  
<211> 77  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-G10

<400> 7340

gaacaatttg aaagaattcc tttgagatct cttgtacgga cctacgtatg aatcggtcaa 60  
atttgatgat gttcctc 77

<210> 7341  
<211> 426  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-022-Q1-E1-H11

<400> 7341

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aagaaacgtg acgaggacga cgatgatgac gattacacaa agccacgtta caagaaacgc 180  
tacgacgacg acgacgatga tgataggaag cctcgttaca agaagcacga tgatgatgat 240  
gaccacgacg atgatatgaa gcagcgtcgc gggaacaacc gccgccgcca cgatgacgat 300  
cactgattat gacatgagtt taagcttacc ctaataagca tagttgcggc ggctttgcat 360  
ccatgaatta cgacatttca ctttttttcc aagcattttt catttcgctg ttcaactggg 420  
caacat 426

<210> 7342  
<211> 367

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-022-Q1-E1-H4  
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 ggggcccttg acggcgggcgt ggccaacgcg catggttccg ttggcgccgg cggcgacctc 180  
 gacgtcctcg ccggaaagcg tggggtggga ggccgcgggc caggaccccg ccgggtggcg 240  
 cgccgggagg acgtggtaga ggagcagcgt ctggaacgac ttgaggttgc ggggctcgag 300  
 caagaagcgc ttgaactccg ggtcgatgtc ccgctccagc gcctcgttcc ggggccccaa 360  
 gattgtg 367

<210> 7343  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-A10  
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 gcgaccacga gtgaccagcg ccattgggtga ttatgggaga agcagacgag ataagctaca 180  
 gggagggagg ggaaaatgcg acgcaggact cgcgagccgt gagggtttat atagtaggcc 240  
 tgtaagtatt ggatttttgg tgatttcacc gagtcgggtg ggaagctcgc gcaggaacct 300  
 gcgaggttac gcatggaatg agctcactga cgattcattg gcaccacagt ttggccaaaa 360  
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<210> 7344  
 <211> 476  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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cgaaaatccg catccgatgg agacagccta cgacctgttt ggaattttttt agaatcgtca 180  
aattcgaaca ggaaaaaaag atatggtcaa atttcagttt tttaaaaaaa aaattgggtta 240  
aatttgggtca aactacttat tcaagaagta ttaatgtgac tacataatta ttcaagaata 300  
tgagtgttac taaataatta tttcaatttt gtgaattttg gtcaaaactat ggtcaaaacta 360  
tgcgtcaagc gtattcaaga catattagcg ttactaaata actaacaatt ttttaaaata 420  
acagtttcaa actcacaacg tgaaatgtgt gacttcatgc tcaagctaaa ctctctg 476

<210> 7345

<211> 216

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-A12

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ttatttagtt tatagcgtca caactttcca ctgtctcttt tcattctcta ccttgtttatc 180  
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<210> 7346

<211> 390

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-A3

<400> 7346

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caagccagcg agtaaccatg cctgatctca gcacgcgaaa tgtccacatg tgttttaatt 180  
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<210> 7347  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-A4  
 <400> 7347

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 cgttgtcaag ccagcgagtg accatgcctg atctcatcat cgcacatgtc gcacatgtgt 180  
 tttagtttgc cagagtccta tatatccagt tggccgcaac ttattgaacc atccagtgtt 240  
 atttgtaata ataattgaca attagcctgt ggatgattcc cagggtgtgtg taagctgtgc 300  
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<210> 7348  
 <211> 395  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-A7  
 <400> 7348

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 aaaaaaaaaa aaaaaaaaaa aaaagggggc cgcccaaaag gttcaaacct aagttaccct 180  
 tgaaggcaat gtaaaacccc ttcaaaattg ccaccaaatt taattcaatg gccgttcttt 240  
 taaaaactcc taaacgggaa aaaccttggg ttaaccaaatt taaaccctt tgaagaaaat 300  
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<210> 7349  
 <211> 339  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-B10  
  
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gggaggcaaa ggctgctcg cgggtcaagac gacggccgcc aagactgccg agaaagacaa 180
aggaataag gccccatct cccgctcgtc acgcacaggg ctccagttct ctgtgggccg 240
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<210> 7350  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-B11  
  
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catgacgtga cggcggacat cgagggtgatt gacgtcgagt acgtgaacac ggccatggag 360
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 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-023-Q1-E1-B12

<400> 7351

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gggtctcacta tgcagagaaa ttgaagctac agcttctaac gctgtctacc actgcaaaat 120  
tggttcagtt gatgcagcag caaagatacg gtacctagat acccggcgtg cttctaata 180  
tgaagtanaa acatttgaat acaagcttct tggggaagta cgaatgatga atgctctaag 240  
gaagcacaga tccatagtgg acatatatgg tcaccaactt tcttctaaat gggttcaaga 300  
tgatagtgat aacgagtaca ggataatgca gtctgtaatt ttaatggaat atgtgaaacg 360  
acgttcactg aacggctatt tgacanaact actgagagac ggcaagaaac atgtacctgt 420  
ggacctggca ttttacattg 440

<210> 7352  
<211> 405  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-B3

<400> 7352

cggcgagtga ttcagctaag caactagcga gtagtagtag taaactctgc atattagggt 60  
tgacgaagtc aaacttccta aagtttgacc aagtttatag aaaaatataa acatttacca 120  
taacaaatat gtatgatgtg aaagtacatt caataatgaa tctaattgga tttatttggt 180  
attgtatatg ttaatatatt ttgttataag ctttctgaga gtttacaaaa cttgactttg 240  
accaatgcta atacgcggac ttaaataaaa acggagggag tacacatttg ttttcttagt 300  
ttgtagtgaa cgaatcattt gttgaaattg tgaaataaat atattaggct attgacttcg 360  
aatgtaatgg tctatacaat tcaatagtta caatcaatgg tgaat 405

<210> 7353  
<211> 365  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-B4

<400> 7353

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 tgacgttagt acatctgcgt actgccgtga tatttaccag tggacgacca atcgatatgt 120  
 ttgcgcgata accatatgtg gaaggattaa ctcaactacc aaatggcccc gtgcgaatgg 180  
 gtgtacacgt actgtagtaa ttataaact gcagaatcaa gtgtcgtatg caacttgtat 240  
 caggaagtcc tccgtatcaa tatcgtgtac gggtttgcta agactcgagt aaacatttgt 300  
 tttcttagtt tgtagtgaac ggacgcactt gatgatcctg gcatacgtat gcatgcagcc 360  
 aacgt 365

<210> 7354  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-B5  
 <400> 7354

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 taccatgata attgatttga gtctactgat tgccagaaac attgcgagca cgaacagaca 180  
 ttagttaagt cacatgatcg taattatgcc ttgaacagac gctgtatcaa ggacctcata 240  
 gatgcgaatg atgattacag caccaaaagt ttgcataatg tacagactgc cacagactgt 300  
 actgtgcata acatattcag cttctcgtat gatggatgct cattctatca cgactatcgc 360  
 aatgaaatta tccgatccac ctgcccga 388

<210> 7355  
 <211> 344  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-B6  
 <400> 7355

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 gtctcacgaa tgtctcgatg atgtgaataa catcctgttg tttggttcag atcgaagctg 120  
 tagcacctgg atgatgcatg ttcctttatc tgtacagtgt gatgttgtga atttgggtgg 180

gtttgagaat tcgtcagttg agttgcccta tgctattcaa taacaacatc attgttttagt 240  
gcactcatgg atgcgactga tgaatagagc agctaaaatt tgcacaaaag acagtactgt 300  
cacggactgt actgtgcatg acatattctg cttttcgtgt gttg 344

<210> 7356  
<211> 450  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-B7  
  
<400> 7356

gggccacggg atcactgcag tgtgctgatg ccgcatgggg cgtcaaatta atgcaacccc 60  
tccacaacgc cgtccataaa ggccatgttt cattggcaga gcctttccca ccattttgct 120  
ctctctctct ctctctctct ctctctctac ccttggttag ctcttcacag tgctatataa 180  
ggggcctcac ctggcgagcc attcttccta ccaccacccc accatgatgt ccatgcatac 240  
ctccccacct ctctctctct cttagcgtcca gctgccgagc ccgagccaca cctgctctcg 300  
gcacgccatc ggcaaccggg gtttctttgc tgactgtctg ccgaggcttt cctccacagc 360  
caggcgttgt cgtccactcc gttggctcaa gggcggaacc tcccagggca ctgctccccg 420  
ctgattcacg gcctggctct accctctctg 450

<210> 7357  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-B8  
  
<400> 7357

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gaggactcca caaagtacta tccccgcttt aacctggaag atacttcaag ttttagggac 120  
ttggatgaac atagcaaaaa tgcctttaga agattatacc atgactatta tttcgttcgc 180  
caagaaaatc tttggcgaca aaatgcactg aagactctac ctgttctatt gaactgttcg 240  
gatatgttgg catgcgggga agatcttggc cttatccctg cttgtgttca ccctgttatg 300  
ctagaactcg ggttgattgg attgcgtatc cagagaatgc ctagtgaacc aggcttgga 360



tttgatattc cgtccaagta cagctatatg acggtttgtg ctccctcatg tcatgattgc 420  
tccacattac gtgcct 436

<210> 7358  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-B9  
  
<400> 7358

ggggataagg aaagtgacgt ctccggagggc gaataggaaa tctcgggaagg agaggagtat 60  
gacaacccca aggccagtga cgccaagaag aaacaaatat gcgaggggtga ggagaatggc 120  
gaagatgatg aggaagaaca agaggagcac gacgggtggag gatgtgacga cgatgatgat 180  
gatgacgacg atgatgacaa tgaggacgac gacgatgatg acgacgatgt cgctgctgaa 240  
tacgatgagg atggagtata agaggaggat gacgaccagg acaacgacga tgatgaggag 300  
gacgatgacg aggactcgct ccaaccccc aagaagaaga agaagttaag cccttcgaag 360  
ccgctgcctt aatcaccatg ccatt 385

<210> 7359  
<211> 333  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-C1  
  
<400> 7359

ttttgttaag ttaagcgagt cacgtagcat gcaagtatgg tataagttgt gtgacaaatt 60  
tgttgcatga cgtgctcttt tgattgtctt ccttatgact ggcagtcggg gaccaacgat 120  
ggtcatttcc tactattcta tacctcttgg ggcattgcgta gtagtacttt gcatcgaggg 180  
ctaagtcgac ttttgactt atctatatga gttctttttg actaatgtga gtccatggat 240  
acacgcacag tcatecttcc actttgctat cctctattag tagagcgcag ctttcacagg 300  
tctcatgaag cctttatttt tcttctacaa ctc 333

<210> 7360  
<211> 435

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-C11  
 <400> 7360

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 tccggttttag gcagcagggg aaatcacgac catggttgga gatgacgaat taagataaca 120  
 aaggcagtgg gatattttgc aagtgtgtca tgggtgaatgc catattaacg aaatatctat 180  
 gatagctcca tcaatattat gaggatatgt tataaagaga aatcaccatt gtgattatcc 240  
 ctcgatttaa attgactgag gatccataca attcaattac atgagttgca tacattaaat 300  
 gagatgatgg catgatgaca tgatgcaatg caacaagcaa ctaaaacaca tggcaaagct 360  
 cggaataact ggaagtcttc tggggcgccg ggctcggggc gttacaacac tccactacta 420  
 caggaggatc tcgtc 435

<210> 7361  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-C12  
 <400> 7361

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 ctcaactcct tttcaatttt gacgacacaa tatgatgaag aatagtcaca gtctgaatat 120  
 atgacactta cagtctccac gtctgtatca tccagcatca ttggtgcaag gtccgagagc 180  
 cgaacctcct tggcctccac ctgagttgga ttggacgcct ttgccacctg cacacgcata 240  
 cacagaagag acatgataac cataccaaat cactttttta tttattgcat ggatggcagg 300  
 gcaattctga atatgaagtg actccagaca cttaattcta ttgaaccatc aaaagagatg 360  
 ccacacttta gtttctacaa aaggccccta gtcaacatat taacatcacc ggcaatgttt 420

<210> 7362  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-C4

<400> 7362

cggggtttcgc catgtgtttc atttgtgccc gcccttttat ttgtgcattg catcatgtca 60  
tcatgccatc atgtcatttc ttttcttaac tcgactaaat aaattgcatg gatgttcggg 120  
ccattttaa atcgatggatat tcacaatggg gattttctcat tataacatac cctcccaata 180  
ttagggagct ataatacata gtccatttaa ttggaagcca ccgctagaga cttgcattat 240  
aaatccctct catttctaaa ttattttgca tccatgatct tttctccgca tggctccttt 300  
caagttgtgg cacattggca ttatgctgcc aagtggctac ttgttaattg tcagctcaat 360  
tataaaatat ttggaccctc aaatattttc t 391

<210> 7363

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-C5

<400> 7363

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aaactagatc atactaaagc tttattctac tagatcaaga ttttactaaa aggatcgaac 120  
taagaaaaac agtaaagata ggagtgtgat ggtgatacga taccggggca cctcccccaa 180  
gcttggcagt tgccaagggg agtgcccata cccatgtgtt tatgtctctt tcttcggagg 240  
tgggtgatgtg atattcttgg cgatgatgcc cctcaggata caattctctt cctcgagtta 300  
ttgacttgct gcttaaggtc cattatttcc ttacggagct tgcccgtgac gactaaagct 360  
cctttcacca atggatgttg tatagctgcg ggagaacaag taacactctt tttcatattt 420  
tcataagaaa gaaatctaac attagaaagg atgaccgagt ttggga 466

<210> 7364

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-C6

<400> 7364

ttcgccggtc cacgggttac atataaggat cataaagcaa agtcaaaac tagatcatac 60  
 taaagcttta ttctactaga tcaagatttt accaaaagga tcgaactaag aaaaacagta 120  
 aagataggag tgtgatgggtg atacgatacc ggggcacctc cccaagctt ggcagttgcc 180  
 aaggggagtg cccataccca tgtgtttatg tctctttctt cggaggtggt gatgtgatat 240  
 tcgtggcgat gatgcccctc aggatacaat tctcttcctc gagttattga cttgctgctt 300  
 aacgtccatt atttccttac agagcttgct cgtgacgact aaagctcctt tcaccaatgg 360  
 atgttgata gctgcgggag aacaagtacc actctttttc atagtttcat acgaacgaac 420  
 tctaacatta gaacggatga ccgagtttgg gatagctgag ctctgt 466

<210> 7365  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-C7  
 <400> 7365

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 ccatgaacaa gacaagtcac ctgcaaggat tacgctgccca aataccttcc acatgaagaa 120  
 caattcatca cactctgccca tcttcataag agcaacatat gggtagacaa tttgaagggtt 180  
 atcactgatg gttcatgcat gctttctgtt ggctggctgt gcttcgttct ccacaacgag 240  
 ttgccccgaaa gtgacatctg cctatttgaa gtatcgaaaa acgacggtga agtgacaatg 300  
 gttgttcatt ctcttgaagg aggtcatcac ctacaaggga aagagcccga atctcaaaac 360  
 aagtgcagtt atccagttaa ggtcgagggtg accgacgaag aggagagtga caaagaacat 420  
 gccgagtcca gctactacta ctcaaggtat gcctatgacc tg 462

<210> 7366  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-C8  
 <400> 7366

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agagtggcgc tgatggtgaa ggtaccagca gtgccatcct ccttggcaga caccttctta 120  
gtctcaggtg gagctgccat tgccttctta cacttgccgg tggagctcga tggatcggtcc 180  
tcgacggtag cgcagcactc cgaggagggtg cgcttgccgg agttggcatc agagctcttg 240  
ccggactggg tcttcttcgt cccccggga gcttcagegg caagtgtcct ctgttctgcg 300  
gcagctacta cttcccggtg gatcttgtcg gcacaagtaa gagcatcctt cttgtcgcca 360  
gggacaatga tgacacttat gacgccgagc attttcagta cgttgtacgc atagtggagag 420  
gctgctatga ac 432

<210> 7367  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-023-Q1-E1-D11  
<400> 7367

gggtccacgg cgtagcttaa aggggttaaa gcgaacaaag gacgcagaga gtttttatac 60  
tggttcggcc cctcgcggtg aaggtaaagg cctaataccag ttgttgtgga attactaggg 120  
tttcgatgac cagggagaga atccgctatg cctggctctc gagttgttgt ttgttgtccc 180  
taaaccgccg tcgggtcgtc cttttatata cacagggtga tgcccgacgg tttacagaat 240  
cccgaggccg gtcataaac gtgtccggct cggtttctac ctttcctatc ttacaacaca 300  
agttacatat gatatggcgg tttaggtcta catgccataa cccgcctcta ggccctgagc 360  
cttcgtaaag cgccacactc cttgtcctca tgggcttcaa atataaataa ctattatgg 420  
ggataaccgg gactctcct 439

<210> 7368  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-023-Q1-E1-D2  
<400> 7368

cgggggccacg ggcgggacga actttgttgc cgtccccaat acagcaagag ggcacatagg 60  
cggcgcatta aatacgtttg tcttacagtg tcaggtgatc aacttgtaca ctgtagatac 120

tttccacctc ctgtgtgcc a ctgtggcgac cgctttgaca tataaaagga ggcccagggc 180  
gtactgtgga aggattcgga ctttttggac tgggcatgca tggcagctag ttcaagagct 240  
caagaacacc aaatatacac agacaagcag gactagggta ttacacatcg tttgcggccc 300  
gaacctgggt aaaaattccc ttgcgttact cgtctagacc tgctctttgc gcagcccttc 360  
acccccgcca actgt 375

<210> 7369  
<211> 452  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-D7

<400> 7369

catcgacaac gcaaagaagc ataatgctgg gacaagcaaa gctgctcata gcaccacatc 60  
gctcaataca aagaggcttg atgatgatac agagaatctt gctcatgagc gtgtgccgtc 120  
agacctgaag aagagcatta tgcaggctag aacggacaag aagctcacac aggcacagct 180  
tgcacagctg atcaatgaga agccacaagt catccaggag tacgagtcag gcaaggctat 240  
cccaaacc aa cagatcatcg gcaagctgga aagggtcttt ggcacaaagc tgcgaggcaa 300  
gaagtgaagc tgcgtgtgca tctgacagga gtcgaggctt tcaagagagc ttggctgggc 360  
aagtttaccg ctaaataaag cttgtctact aaatcatgcg acttaagaaa accccggagt 420  
ttggtatttc gctcagggtt gggatgaatgt aa 452

<210> 7370  
<211> 347  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-D8

<400> 7370

tgatcacgtt tctgggacaa acttcgcgtg atcactgcac gacttcgact catttgaaag 60  
acgtgtgaag agttaagtga caatctggca catgatcgta tctcgtcgga cctaacttag 120  
aacattacgc aagctagatc cgtcaatcag ctcatatacg tacatcttgc acatctcatc 180  
agtgtcaagc aactgggtcat ctattagtag aagtcaggca atgctttctt atcacgaata 240

catcattggt atcctcgaac atggatcatg gtaccgtacc gtcacgtctt actcgaagct 300  
gcgtgtgtat ctgacaagag tctacgattt caatacagct tggctgg 347

<210> 7371  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-D9  
  
<400> 7371

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actcaacatt aatcaaaaga actcatacac ttgttgcgaa aatttagaag tcatcaaaaa 120  
tcaaaacact acacgcatgc tcttaggggg atagattggt aggaaaagac catggctcgt 180  
ccccgactgc cactcataag gaagacaaac aataaataaa attgtgctcc aacttcatca 240  
caaagcgggt caccatttgt gcatgctacg ggaatcacia acttcaacac aagcattctt 300  
taaattcata atcaccccaa ctaccattgc ttgatacta tcacctccat atctcaaaac 360  
aattatcatg catcaaactt atcttagtat tcaa 394

<210> 7372  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-E10  
  
<400> 7372

ggtccacgac gtggccggtc agtaagggtc aatacgggtc tctacgatga gctagtgatc 60  
gtataatcac cgcaaaacta tatatactga ccgtaaagag cgtattgtta catacgttga 120  
ccgccagtgt attttttctca tttcaaatta agccatatta accggaaagg acgcagtatg 180  
gactagtact agtactgctt tgatgtgtcc catcaactcg ccgaacgagg agaagcttgc 240  
ttactacgcc tctccctcgc ccacgtgcgc ggtgggtcgc aggacgagga gatgggtttg 300  
agtacagcgc cctctccctc tccctcgccc tcacagtgga cgtgcagcag ttcaattggt 360  
gtcagattgc cagaagcata atgtgtactg tagtatcatc attgttggac cttctgaaga 420  
ggcgacgagc caag 434

<210> 7373  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-E11  
  
 <400> 7373

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 tattccctta agaacgctag ctttcgactt caccagctct gaggtacaca tccggctgac 120  
 ccagcagtaa caatcgcaga gggctccctt tatgccctag ccgaattaac gggaacgtan 180  
 ggcataaata caagagccag gcaacctagc ttggccaaaa ctttaagtc atcgatgcat 240  
 ataatggtga ataacgggta catgccgaat gataacacat gtgttgggca taaagcccgt 300  
 atgaataagc ttctgttaaa gaatccccca ggtataatga gcgcggatag cgcgtcagtt 360  
 gcgtgcaaac aaggcatgaa tgggctccta aaggctgtga gagaaaaaga aaaggagaag 420  
 gagaaaaata taagacagat agtgtataaa aat 453

<210> 7374  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-E12  
  
 <400> 7374

tccacggcac ctcgttgaac tgcagatgca caaaacatag tgtaccacct ccttcctcaa 60  
 cccaaaattt gaatttttcc accaattgca aaacctggaa gaataaaaaa aaagggtcaa 120  
 caaccaaag gaacctaacc aatcataatt gccctaagaa caatggtctc aggttcaagt 180  
 caagaggaag gccttgaatg cccatttgct gtgaatcctt caacatcgta nagaacgttc 240  
 ttatgtcntg tgggtgtggtc acacaatgtg caagaactgc atcttaagtc ttcagtgggc 300  
 tgttgtcaag ttcncaacct ttectatcca gctgcctctc tttgtctcgt gtccttgggtg 360  
 caacctatta tctttccggc tgggtgtacaa gggcaacctc aagttcccac gtaagaacta 420  
 ctttctgctg 430





<223> unsure at all n locations  
<223> Clone ID: LIB104-023-Q1-E1-E5

<400> 7377

gggccacggg tctgcaacaa tcaaatccgt atgtatcttg caaatctcta tgtctccac 60  
ctggacttga tcccggatgg aattgaagcg tctctcttga tgtgcttggt tctcttttga 120  
aatctggatt cctttgccaa ggaaattgca ccagtattgt cacaaaagat tttcattgga 180  
cccgatgcac taggtatgac acctagatcg gatatgaact ccttcatcca gactccttca 240  
tttgetgctt ccgaagcagc tatgtactcc gcttaacatg tagataccgc caccgacgtt 300  
tgtttagaaa tgcaacaact aacagctcca ccattcaata taaacatgta tccgggttgc 360  
gatttagaat cgccccggtc agtgtcaaag cttgcatcga cgtaaccatt tacgatgagc 420  
tctgtngtca cttcataaac gaagaacata tc 452

<210> 7378  
<211> 105  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-E7

<400> 7378

cgggtttaaa ctaatcatat cgatatgtgt catgcaacgc tataagtcga taaagtgaac 60  
ttgatgtcgg atggagctta tgcgtcacgc atgtagtgcg tgggt 105

<210> 7379  
<211> 456  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-E8

<400> 7379

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ggccaaggac ttcagcaatg ccagctcatc gcgatcgccg acacggcgag tgcgcttggt 120  
agagcccagc gtgcccgcga gagcttgttt gagggcttcg tggcgcgccg agatatctct 180  
gttgcggtcg cctctacgcg gggggacctc tctactgctt acgtggcctt ggtctttgct 240  
gcctggttat atgtccaccc gaaactcctc ctaccggtca tggcggaatg acttgacaag 300

aaagaccagt tttgtgggtg atgaggagag gaactgtgaa gtgatttttg agtgggtagt 360  
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<210> 7380  
 <211> 439  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-F10  
  
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 tgccgtcaga cctgaagaag agcattatgc aggctagaac ggacaagaag ctcacacagg 180  
 cacagcttgc acagctgata aatgagaagc cacaagtcac ccaggagtac gagtcaggca 240  
 aggtatcccc aaaccaacag atcatcgcca agctggaaag ggctcttggc acaaagctgc 300  
 gaggaagaa gtgaagctgc gtgtgcatct gacaggagtc gaggttttca agagagcttg 360  
 gctgggcaag tttaccgcta aataaagctt gtctactaaa tcatgcgact taagaaaacc 420  
 cggagtttgg tatttcgct 439

<210> 7381  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-F11  
  
 <400> 7381

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 cgagtacggg taccgggtcc ccttcggtgg catacacgct ttcattggca agatcgggtga 120  
 gcctgggcct gagccggaca tctgcaccga cctcgtcgag acggctcagc gtgcaagatc 180  
 taccaggtt aaaccggcca tgaagcgtgc cttcattgga gtcattccacg gaggagagcg 240  
 tgacgacgaa tcagaacact gtagcgagac catcgcttat tccggcgacg aatccttgac 300

cggagagacc gaatcgctat accagttgca agacgaccag attaggggct gttctgatgg 360  
 cgacagtatt ccggaccccc cgggccaggt caaccggggt ggaatattca tggccggcac 420  
 acatgcggcg aatcactc 438

<210> 7382  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-F12  
 <400> 7382

cccaattaac aaactcccc aaaggcttcc cccaagcccc ggctgaaaaa attaacaaca 60  
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 aacccggtac caaagggtcca agcagcaagc catcaccccc ccatgagcca aggaccctcc 180  
 ttttccttcc ttattaatct agagatccct tttttgttta acctaategg acatgaagct 240  
 tcctcaagct tgtttttcat tggctcttgc taaggtttgg tcaagttgtc agtccaaca 300  
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 attcttgc 368

<210> 7383  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-F2  
 <400> 7383

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 acgctgtgca ttgcacagga gcgagtgtct cgcgtaaaag ttaactcgct aatgctagtt 120  
 gaccattaga cgtgagcatg ccacagttgc gtgattaggg aagacttttg ctctgtcaca 180  
 caaagcacat gtggctaagc tgttccgatt ttctagcatg tggagcagat aaaactgaag 240  
 tgccagggtta gtggtgatgg tttttaaaca caacgacagt gttgcatttg ctggtcaaaa 300  
 cggacagacg aattancatg aaacagatta aacttgctta gtgaagtgat agctaagtgtg 360  
 aacaaacttg ggtcttcgct ggccgccaat gctccacgtc ngcacttgac anactgggtc 420

cgccagccaa cgttgctcca cggcatgcat gcacatg

457

<210> 7384  
<211> 281  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-F3

<400> 7384

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tccggccgcg tgcagtgcac gggagatgaa cgcgtgggtt aatttgagc gtgtggtagc 180  
atatgtatgt aatgcttgac atgtctcatg gatcttgtaa tgtaataacc ggctgcactg 240  
catggtgctt gtaataataa cgtaagaa tttccattgg t 281

<210> 7385  
<211> 221  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-F4

<400> 7385

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tcaccttccct ctgccacttg ctcactgtct tctcacctgt cagcttcgtc tgggtccaacg 120  
ctgcatcctt catcaacagg tcccccaaa agttccctaa ggtcatttta tctaaaacc 180  
aatccctgtt aaaacccag ttcctaagaa aaaaatccat t 221

<210> 7386  
<211> 447  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-023-Q1-E1-F5

<400> 7386

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ctcctggccc ttttctggg gacaacctgg cgaaccttcc ctaaccctg gccagtggt 240  
cccgaactaa gttctgttcg acactcgcgc cccgactagt 280

<210> 7389  
<211> 383  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-023-Q1-E1-G1  
  
<400> 7389

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cgcgctgag gagcgctct cctcgggagg accggaangg agcgagtcaa actcatatcc 120  
acttcagagc aagggtgggtc tacaactgct aatttaaagg gattcgattg tccctcgtct 180  
gagcataagc atgataaagt gcagcaactg acttggttta ttgttttga aatcgcaacc 240  
ggtgctctcc tgcttgttt tgtgattact ggtgtcgtta ctgcctacag aagctgcaat 300  
ctaaagcctt ctatacgaat atcatcatgg agcagatcaa aaagttggag cgccgagata 360  
acagtactga ttggccaata acg 383

<210> 7390  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-023-Q1-E1-G11  
  
<400> 7390

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agtcaggcaa tcattacaac atcccatgta atatataata aaagggggag ataacatagt 180  
tggtttacac tcgccagtc acatcagagt acataaataa catccatcaa acaaacactc 240  
atggccctac tacggcgcca aaatagaaaa gaaccaaca tgcgacaagg tcctgaatcg 300  
ataaccccaa ctaggcacca ctactgatca tccggaaagg acacgtagta tcgtgagag 360  
tcctcgtcga actcccactt gagctcgtaa tcgtcaactg gagcagaaac acctggacct 420

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434

<210> 7391  
 <211> 460  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-023-Q1-E1-G3  
  
 <400> 7391

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 aaggagattt caaggttgcg gacctcctgg acaaggttgt ttcctgcggg gaggccggta 180  
 gccgtgcttg tgggtggctc cctgtgggct gcaatttgca ccgtgagtc gtcggctcta 240  
 gctccagctg caccgtggca tcacggcgct ggagcggcgc ggctcaagat ggcaatgggg 300  
 ccccgaaacc cgcgtcccg cggttttcta cctattang ggacggggat gggcgtcttt 360  
 ttaaccccat ggggctgctg ctgggtaaat tataaaacc aacatgtttc acgggtttta 420  
 accggttga gcaatacccg aaccgaaac ccgccatccc 460

<210> 7392  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-G4  
  
 <400> 7392

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 tgtcagcaat gctctctaaa tagacactgc aattatcatg tacatcattg ctgctgcaat 180  
 aaaccactaa gaattattca atatctagcc tagcgccttc gttatcatca accgaggggt 240  
 gaggcggagt taaaaatct gaatgagaaa ccaagggatt gtccaagtca gcgacatctt 300  
 tggtatcttc agagctgtta gaagcagctg agatggcgtc acccgattct gaatgtgttc 360  
 tgccacata tgcttcgggt aaggagctct cgccacatc agcatcgccg ttatgccgag 420  
 caatcagatc ttctcttctg acaaaatta 449



<210> 7393  
 <211> 242  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-G5  
  
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atttgacggt tgcaggcctc ctagagaaag ttgtctcttg cgtggaggac agtagccgtc   180
cttgtggagt gcctcctgtg cgctggaagt tacaccgtca ctgcgtcggc actacactcc   240
aa                                                                    242
  
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<210> 7394  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-G6  
  
 <400> 7394

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ggtgcgctga cgcgccccca cgaaaaagaa gacaaagtag tcgccggaag atccggccccg   120
actgctcaac agtcggccccg aatctcgggg gctacacca gcggtgctgc ttacgcgcgc   180
ccgcgaacac taagacttag tcatcatcgg aagatccggc cacactgtca gcagtcgacg   240
gttaacgcgg aggcacaacc tctcaggtac actccaacgg attgtccaag tcagcgacat   300
cgttgtcacc gtcagatctg ttagaagcag ctgacatggc gtcacccgat tctgaatgtg   360
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-023-Q1-E1-G8  
  
 <400> 7395

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aatggcgagg atgctgagga agaccaggat gatcaggagg gtggaggacg tgacgacgat 180  
gatgatgacg acgactacga cgatcacaat gacgacgacg actatgatga cgatgatgtc 240  
gctgctgaag acgattgata tggactacaa cacgacgatg atgacgatta cgatgatgag 300  
gacgatgatg acttgctcca gccccgatt aagaggatga agtgaagccc ttcgactcgg 360  
ctgctttagt caccatgcga tcagatgtgc ct 392

<210> 7396  
<211> 341  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-023-Q1-E1-G9  
<400> 7396

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gggtgattat gaattgaaag aatgcttgcg ttgaagttag catgtcccat agcatgcacg 180  
tatggttaaa gttgtgtaac aaatttgaaa catgaaatgt acctggcttg tgcacctta 240  
tcagtggctg tcggggacta acgattgtct tttcgtacca agattttcct ctaggagcat 300  
gctcgtagta cttgactttt gatgacatct aaacttctgt a 341

<210> 7397  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-023-Q1-E1-H6  
<400> 7397

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ccatgacacg tggacggtga gtgtaatgga aaggaaaaga ggggaagagg ggaatcaccg 120  
aaggtgatgg agatggagac ggggaagaca tcgatgataa aggtggagac gaggaaggca 180  
tctgtgatga aggtggagaa ttggtgttgg tgtcacccca gaagctcaaa gattatttga 240

tgcattgtcg aagacgcttc cagttcattg ggacaagacc gacattgttg taatgaagga 300  
 ggttcgtgta tgcagtcctt acctgcctga aaatgtcagc ggcggaacat cagctgctaa 360  
 tgaacgggtt aagaaagtgc tggactttga gaggaaaaga caacatgtgc gtgtacctgg 420  
 ccaattctaa ctgttctgac ttgacaattt tcacctcaac tcct 464

<210> 7398  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-H7  
 <400> 7398

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 gtaaccaaca tgcactcaat ctctataggt gcaatcaaaa caatgaagca aaaaaacaga 180  
 ggaaaaatag agcctatttc tctaggcctc tttaatcttt gtgggccttc gacaatcaac 240  
 gcaatgcgat ggcccaacta gagcttggtt tcattttggg cccaataact acattttttt 300  
 ctcttgact tgggtgtgtc tgacgaaact gaaagtgtca aaaactaaca cctatagaga 360  
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 gagcaacaca aagagcacat gattcactaa cc 452

<210> 7399  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-H8  
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 agctgagact gtgctggcaa gtgcagttca agaaacaagc tagtctacct tacctttcaa 240  
 aataagagtg caaaatagtg catcatggta atatgcagtc cccgtctcag gatcaacgaa 300

atatgtagct aggcagaaat agcatgtacg agtaaagagt aacttgcaac atgtcatgct 360  
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<210> 7400  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-023-Q1-E1-H9  
 <400> 7400

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 cgggtgtgatg ccgctaggag gagatggcag tgcgacgctg ccatgacgac cgtgcgatgc 180  
 cgacaagacg gtgatgagat gccgctgaga agatcgatgt acagcgggtg aggccatcat 240  
 gaggategat gtgaagctag ccgcggaggt gttctgggtg gtgtgacgcc atccccaaaga 300  
 tgagggtgttg cgacgacgac ggcaagacgt acgtgaccag tgggtgtgatg ctgctgaaga 360  
 acgttcaagt ggagattgat gatgcacat ggtgaagctg cagcgtgagg caagggtggtg 420  
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<210> 7401  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-A11  
 <400> 7401

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 aagtttgtgta acaaattaga aacaagaagt gtacctggct tgtgcaccct tatgagtggc 180  
 ggtcgggggac gagcgatggt cttttcctac caatctatcc cctaagagca tgcgtgtagt 240  
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 ttgagtcctat ggattatacg cactctcatc ttttcgcctt tgctagcctc ttcgggtaccg 360  
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445

<210> 7402

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-A12

<400> 7402

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agtgaacccg acgcactacc gggagccaag gttttacacc aagggtgttta aggaatgccca 180  
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agcttatgtg aagagcaaga agaaccagaa ccagatatgt tggctatggg agaagggtcaa 300  
gtgcacagaa gacaaaggct ttcagagatt cctggacaac gtgcagtaca aatccactgg 360  
aatcctgcgt tatgagcgcg tgtttgggga gggttatgtc agcaccgggtg gattcgagac 420  
cacaaaagaa tttgtggaca agctggatct gaaagc 456

<210> 7403

<211> 335

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-A2

<400> 7403

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acacgtattg tattgttgcc attgaggata aaaagatggg gtttatatca tattgcacga 180  
gtttatccct ctacatcatg tcatcttgct taaggcgtta ctctgttctt atgaacttaa 240  
tactctagat gcatgctgga tagcggctga tgtgtggagt aatagtagta gatgcaggca 300  
ggagtcggtc tacttgtggt gaagtttgtg attcc 335

<210> 7404

<211> 309

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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<400> 7404

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 aggaacaaat tcaaaacggt ttacttcaac cttgcggcct gacgctgcaa gatcacttgc 180  
 gccttggtac aaacaaaacc ggaataacac acgccctctt tcttctcatg tataccgtag 240  
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 aactaaata 309

<210> 7405  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-A5

<400> 7405

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 tgctatcttt gtcgtcatcg accaattctc gaaggttgct cactttctgc cagtcaagga 240  
 gactatcact gctagtcaat tagcacactt gtatatctcc agaattgtgt cactccacgg 300  
 tattccgaag gagatcagtt cagaccgtgg aagtattttc actccgaagt tctgggatag 360  
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 agc 423

<210> 7406  
 <211> 142  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-A6

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<210> 7407

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-A7

<400> 7407

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tggtggtgcg agagcctccc cagcgcgctc accaccctcg agatcgaga ctctggtagc 180  
gcacacaacag caaccgcaca gagccgcagt ggacatcacg gtctgtgcgc cagcctagg 240  
gtccgcagcg acagggtcgg cggcaaatct aatccatata cactggtttc agcagtaagc 300  
tgacgtctca tacatcaccg cgttcattct ccatcttgct ccttgacaaa ttagattggt 360  
ctaccaattt ttttttggtg attgtggacg accaagataa ggataagaga aagtaatcat 420  
aaa 423

<210> 7408

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-A8

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cttggttttt ctccatctt cgttggttga tcgggacgat aaacaagtgg tctcacaagt 180  
cagcatggat gacgattggg tggaaacgaa catagaattt gatggacatg atgaaagcgt 240  
ctctggcaat gctgatggca tacttaggcg tgtggaattg catccagcat agagtacggt 300

tatgggtgat gtaaactcat caatgatgag cagctgggta acaaaggact cgaactcttc 360  
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 catcgtgaaa gcagccgcaa gtgggactga tgttg 455

<210> 7409  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-B1  
 <400> 7409

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 tcagatttcc aggttgctcg gtgagatttt acagtttttc gtagtttaga tccagtcctgt 120  
 tcttcatatc tacagtccac gaaaaagcca caaaaaaatt tagggtagt tcatcatatc 180  
 cgaaccaatc tgagcctttg cataatcttt ttaaggtttt tgctttgttg aatttgcggg 240  
 tgcacgtcg gtctagtgtc tgggtcttaga gtctagtctt ttagagtctc gagttctggg 300  
 cataagttgt cagcgcgcg ccacaccatc atcatcgccc ctgccatcta ccaccaccgc 360  
 tcatccgcca ccgtccgaa ttcgtatcca tataccacca ccaatccgtg tccatat 417

<210> 7410  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-B10  
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 tggggccggg agtttaccaa tgtttcttca tggatgcctc cctcatctta atattgaggt 180  
 ggttgagttg gaccccatga tggaggaggt agcaacgaaa tattttggct tttcaatgga 240  
 tgagcaattg aaggtgcatt tgggggatgg aatcaaattc attgaagaaa atgcccattc 300  
 tgaaccaaatt ggcaaagaca gtgacgcagt tagaattctt attgttgatg ttgaatcatc 360  
 tgatctaagt tctgggttgt cttgcccccc agcaaacttt gtcgaagatg ctttcttat 420



gtcagcaaaa aagttccttt ca

442

<210> 7411  
<211> 448  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-B12  
  
<400> 7411

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agatgctgag ggattgccng agcagttcnt atgcagggaa aggcattggct atgcgagatg 120  
tcccgatgac acaggccaac atatgaagca gagcgccaaa gggtcactga gtgtggggga 180  
tacattgaag atggctacct caacggagta ttgtcgggta ctctgtctct aggggattgg 240  
gacatgaaaa tgcctcaagg ctgcagtc cctctgatcg ccgagccaga gttccagcag 300  
accgtcctca cggaggatga cgagttcctc atcataggct gcgacgggat atgggacgtc 360  
atgaccagcc agcaggcggg gaccctggtc cggaaggggc tccgacggca cgatgacccc 420  
gagaggtgcg cgaggagct cgccatgg 448

<210> 7412  
<211> 333  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-024-Q1-E1-B2  
  
<400> 7412

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aaaggtgtgg gccgcctgga cttgaccggc atccccgcgc gccgcggcta taacttctcg 180  
taaattaggg agaccagca atggagacta ccaaagggt caggtcaggt caggtcaggt 240  
ccgtgaaacc agtagtagta gtagtaccag ttggttttgt ccagcaagc aagcaagcaa 300  
gcaagagcat ccgtctctc tatgccccct ttg 333

<210> 7413  
<211> 211

<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-B4

<400> 7413

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aactattgat aatctgactg atcatccctt gttcaagaaa gggttttaaa ctgtagtaat 180  
tccgttaaga tcaacaccac atgcttcaaa g 211

<210> 7414  
<211> 451  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-B5

<400> 7414

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tcgtcctata catcagcacg tcgaagcggc ccctcaccga ctgagcatac gccgagtggg 180  
gcattcacat catcatgatg taatttcaag gtcgttaacc cgatgattgg ttgtgatctg 240  
actggtgcta ccttttgcaa tcttgtacgt gttgtctgct gtagtgccctg ctgacagaga 300  
cttatctgga atcatttcga tttgatgtta tctgcgtttt tagcttggag atgtttgtgg 360  
ctaagattct gcgatcagga tagatagtag atttgtgtgt ccatagtcct gtgctgcata 420  
taacagacat tacgtgtctt aaggacacc c 451

<210> 7415  
<211> 389  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-B6

<400> 7415

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ccgtatctac tgagggtcaag tagtgacatg tctcgatact ccggaacgag ttgcaccatc 120

gtcctcgct gcatcactgc taagccggct ctcatcctgt gatcatatgc gaattacacc 180  
 gtccacatca tcatgatgta atttcaccgt cgtaaaccgc atgactggat gatatctgac 240  
 tgcgttcacc cttcttgcaa tcatgtacct cttgtctgct gtagtgcttg ctgacatcga 300  
 cgtacctcga atcacttcca cttgatgtgg acatcctttt tatcttggag atgtttgtcg 360  
 cccagattct gccattatga cagacagga 389

<210> 7416  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-B7  
 <400> 7416

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 caactgtggt tgtgcataat tatggttatg tcagacgtgt taattgtcgc aatttccaat 120  
 tgggtgtact atatatatgt ttgccaaata atgtgtgcac cgtgtgcaac tatggaacag 180  
 cgaagtggta atcattttgt gagctttgga acagtgaagt gacacatatt tgcctaaaa 240  
 aaaaaaaaca aaaaaaaaaa taaaaaagaa taatcaacaa aaaaacaaac aaaaaatcaa 300  
 aaaaaatgga accacttcta gatgatcgac ctcgacgtac acatctagga aacttcaagg 360  
 ctctccaatt ctgccatcaa gacacattgc ggacccc 397

<210> 7417  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-B8  
 <400> 7417

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 ccatcgtgcg tggcaaaaat ttatacatcg gcttggctca ttcccgaac ccgcgtcgcg 180  
 tcgcgccgtg acgaggcgag gcgtggcgtg gtgtggcgag gcgggcggcg gaggaggagt 240  
 gcgcgtggat gtccctcttg ttctcatcct cacacatgtg gggaaagaac ctcccttata 300

aagagatcca actccctcta aacaagcaat gtgggactaa acttttagttc cacctcttgc 360  
 cttgtacgaa tgggttgtgt gggcctcagg atttattagg aatttttgaa actgctattg 420  
 ggct 424

<210> 7418  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-C1  
 <400> 7418

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 aaatttacct ccttggcagc caaaccagct accatcattc tctcaggatt cggaggcttt 120  
 ttcagcttca gtgatttctc aaacaagccc attaagcaga actccaacaa gaagaatccc 180  
 aacaacctcc cccagaataa aggccagtct aataacaatc atgaagcgat gagcaatgac 240  
 tggctggaaa atgggtcaatg ccctcttgca aagtcata tagcaattgg tggagtcgtg 300  
 cctcttgctg caaaactgct ggcgccccca gctggtatga aactgacgtg ccctcctgca 360  
 attgttgctg cccgtgcagc aatatccgc acggcgtttg caaaagggct tcgccctcag 420  
 ccctaccga c 431

<210> 7419  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-C11  
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 atctggaaga tcatcaatgt gtatgaaata gtcttcaaca ggcatgcaa cgaccaaattc 120  
 actggaatga aaaagggtga agaatggggc accggcattt gtttcaggca gggagaaaaa 180  
 caatgacaga gtatatacgt tcgtcaaaat gaaatagggg aagtatatctt acttacagat 240  
 tgttcagctc aaacatgccca attatatggc catacacctc aagggaacaa actagagcaa 300  
 gttaaggtaa ctcgaatgac aacgataact actcattgta tgaaagtttg aaacaagtct 360

ggtaactgcc aaaaaaggat acatggtgca cactcagcat cgaagatcgc atccttgaga 420  
agcttttagtg actgcaaata cagaagccat gat 453

<210> 7420  
<211> 307  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-024-Q1-E1-C2  
  
<400> 7420

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atttgcttga tgttatttat aataatgctt tgcattctta ttttttcaat caaatgtcaa 120  
ggatagcctt taccatgctt attttgcaag tatacatggt gctgtttcaa aacagaaagt 180  
ttaccgctgt tgtaaaaatt tcttagaaaa gtcagagagt gatataatgt tgaattcttt 240  
tgaataatga gctctgataa atcttttata gcatagtatt tttcttataa tttttggagt 300  
taaggaa 307

<210> 7421  
<211> 304  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-024-Q1-E1-C3  
  
<400> 7421

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ttatatcttt tataggcggg ggattaattt tgaagaacc gttcatctat catagtccac 120  
ctatatcatt ttgagactcc tttagaacat tatgctattt gctatcggtt taaattcctc 180  
ctacaatgat gatcccccaa gttgggtata attgatacta tcataagacg ttaattggat 240  
gttaccatca acctgatact tgatcattgt tttgatataa ggatgtattg atattaggat 300  
cttg 304

<210> 7422  
<211> 146  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-C4

<400> 7422

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cggcttcaat cccccgggtc gggtccttgg cctgggtcac acccttacca acaacattga 120  
cgggcgctcc aaaaactccg gcaacg 146

<210> 7423

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-C5

<400> 7423

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gcatattcca gcatataacc ttgagaaatt cctcgatatt gatctagaag aaatttatat 120  
gtattgtgcg gtgaattgca ttgaaaactt atattgccaa ttacataaag aagaggaaac 180  
aaatagaagt tgaagagaat actaacgaaa gggaagagac ttcccaatat tctcctatta 240  
tttcttatga tgaatcaggt aacgaggagg agccttatat tcaaccaatc tcattaataa 300  
ggagctccaa aaagaggatt gaaccacac atgatgtgaa gaagaaaaag aaaagatgga 360  
gaaggaaagg tagaaaggta tctctcccaa atgatgttgc tcctattact cattgtgatg 420  
atgat 425

<210> 7424

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-C6

<400> 7424

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gccagctgga gcgttggttg acattagtaa cttcatgggc acacattctg gaaatattga 180  
ccatgctgtt aatgagaaga gaagaattga gggàagaaac actgcatctt cctttaaacg 240

cccccgctct tccagataaa tcctttgatt tgcacccctg ttagcaggct gtaaactcct 300  
 tgatgccatg cttttgctat gcccttgctg tcaatgtgag tttgacactg catgtgtttt 360  
 gcatgctggc gacgtttatt tatgcagcag caaggcagtg gatctttttt ttcagacgga 420  
 tctaaaatga agatgattgt ctt 443

<210> 7425  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-024-Q1-E1-C7  
 <400> 7425

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 tataccacga cgtgtttgcc cagagcacac atggcgtatt agcatcaacc atctgtgtta 120  
 ttatcggctc togcagacat ttctaattac agacctagtt gccgtgtacc acacacatct 180  
 tgttaagttg aaccgtttct gttctcttgg gtcaacgcaa acagttcatc tgagtgaact 240  
 gtatgccgta tatcgcacac acctttgatc tggctgagcg tttctattgt gttgcctaag 300  
 aaaaaacagt tcagttagtg aactatatgc catatatcgc agacaccttc atctggctgc 360  
 acatttctgt tgtcctacct catcgcaaat aggtcactgg agtgaaccgt atgccaggta 420  
 tcgcacacgc aactctatct gaaatgtgtt tg 452

<210> 7426  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-024-Q1-E1-C8  
 <400> 7426

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 gtacgtgggc gacgaggcgc agtccaagcg tggatatctc accctcaagt accccatcga 180  
 gcacggcatc gtctccaact gggacgacat ggaaaagatc tggcatcaca ctttctacaa 240  
 cgagctccgc gtggcccccg aggagcatcc cgtcctgctc accgaggcgc cctcaaccc 300

caaggccaac cgtgagaaga tgacccagat catgttcgag accttcaaca cccccgcat 360  
 gtacgtcgcc atccaggccg tgctctccct ctacgcctcc gggcgatata ccggtatcgt 420  
 gctcgactcc 430

<210> 7427  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-C9  
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 aatgaatagg ggaggctttg cagcacgcat gatcttgcca gttctatcgg tggctcttct 120  
 cgtccttgtc agcgttgga tctatggatg ggcataatag ctctctttat ggtgggattt 180  
 aatgtgtcac attttcccca catcggtgt gatcattgta catactgtgt cttgctgcct 240  
 gcgtttaaga ctgttgtaag acagcgaagt gtttgttccc cttcgggcgg gggactgtga 300  
 aatgaagaag tgaggtaaca aatgagaagc gggatgaagc aaggagcaac tgttgctgta 360  
 gatgcctgtg acttagtaca tgctagtttt tgttttcctg tcatcacaga tgttggcaac 420  
 caggttgtag ccatcca 437

<210> 7428  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-D10  
 <400> 7428

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 tcgtcgtggc cgctctcatc gtggatcatg ctgccaccct tctcctctcc tcgtgcgacg 180  
 cccgcaaaga gaaggataag cccaccgctt cccccgtgtc ggggaagtgc ttctcgaggt 240  
 ttttcccaca ctgcaccgat cagcgatgca agaagttctg cgtcgagcca ctccccggag 300  
 ccgtctgcat cgacaaaatc cactgttgtc gccctattgc ttagttataa gcgtcgttga 360



agcgatcggg ctaagaaata gtactggtta aagatggcaa catgcaatat ttgtacactt 420  
cgacatatat accacctctg ttt 443

<210> 7429  
<211> 454  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-024-Q1-E1-D11  
  
<400> 7429

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aaaaatgcaa agaaaaagta gatcgcaagg caaatatatg tgaaagaaga cccggggggcc 180  
gtaggtttca ctggtggctt ctctcgagaa aaatagtaaa tagtgggtaa acaaattact 240  
attgggcaat tgatagaacc tcaaataatt atgacgatat ccaggcaatg atcattacat 300  
aggcatcacg tccaagatta gtagaccgac tcctccgtgc atctactact attactccac 360  
acatcgagac gtatcagcat cccaagctt aattcctact tgccctcgag taggtaagtg 420  
ataaaaacag aaattttgat gtggagtgat gttc 454

<210> 7430  
<211> 309  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-D2  
  
<400> 7430

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gacggtgaag cgcgacaaca tctgcagctt catctcgag accaaccg ggcacgtgcg 120  
gtcgtgggag accaaggaca gccagctgac gatggtggcg gacgacctga agccgcgggc 180  
ggtgctgacg tgcccggaga agaagttgat ccagcangtg gtgttcgcca gctacgggaa 240  
cccgtgggg atctgcggca actacacngt gggcaaagtc cacacgcca aggccaagga 300  
gattgtgga 309

<210> 7431  
 <211> 327  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-D4

<400> 7431

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 gcggccttca tegtgggtcat ggttgcaacc cttctcttct cttcttgcaa cccccgcaag 180  
 gaaaaggata agcccacggc ttcccccttg tcgggaaaat gcttctcgag gtttttccca 240  
 aactgcacca agcagcaatg cacgaagttc tgcgtccagc actccccggg agccgtctgc 300  
 atcgacaaaa ccaactgttgc tgcccta 327

<210> 7432  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-D6

<400> 7432

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 ttttaattag tgtttggtgcc aagtagaacc gttgggaaga cttggggaaa gtcttggtga 120  
 tcatgctgta aaaaactgaa acttttagcgc tcatgagatt tcctgccatt ttttattgga 180  
 gagtgtctatt tagttaattc ttttgcagat gattaatata taaattcctc acgtccagaa 240  
 atttatttta gaatttttga ggtaccagaa gtttgcgtta gttacagatt actacagact 300  
 gttctgtttt tgacaaaattc tgtttttcat gtgttggtta cttattttga tgaatctttg 360  
 gctagtaaaa gagtttataa accatagaga agttggaata cattaggttt aacac 415

<210> 7433  
 <211> 461  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-024-Q1-E1-D7

<400> 7433

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tgagctaagt agttttgctc tatgtgcttc acttatatct tttgagcgtt ataattttgc 120  
tctatgtgct tcacttagat cttttcgtgc acggtggtgg atttgtttta aataaactat 180  
tgatctctca tgcttcactt aaattatitt gagagtctta atagcatggt aatttgctta 240  
ataatgacat gcttggtatt caagatttgt gaaactttct tttgagtgtg ttgaatacta 300  
agaaaatttg gatgcttgat aattgttttg agatatggag gtaatgatat caaagtcatg 360  
ctagtagagt aattgtgaat ttgagaagtg cttgagttaa agtttgcaag tcncgtaaca 420  
tgcatgtatg gtaaacgtta tgcaacanat ttgaacatga g 461

<210> 7434

<211> 336

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-D8

<400> 7434

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ctctccctcc gacacataca tcattaccct taaggtagaa ttacttact ccaaatgcat 180  
tgctctatct gcatctacac catgaatcta tgacgtgttt caaagacgaa atgagttgcg 240  
ggagtattac gaacatttgt atacagcatt aatctacgat ctggttcact gagtagatta 300  
ctgggggaaat ttgtatacca taaatctatg atgtga 336

<210> 7435

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-D9

<400> 7435

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tegacatagt cgcctcacc ttggtcacgg gtgccagtct gctcttctcc tegtgccatc 180  
 cgtcatcga tatagatacg cagctcgatt ccccatgctc tgagaaatcc ctcacgaggt 240  
 ttttcacaca tttcacgcac catttataca ttacctaccg catccagcca ctcacctgtg 300  
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 gccaatcggg ctatcatcaa gtactgggta aagatggcaa cc 402

<210> 7436  
 <211> 344  
 <212> DNA  
 <213> *Triticum aestivum*

<223> unsure at all n locations  
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 tgctcaagaa tgaaacgga accctccgc tctgtgagc agtcgacgag agaaagtaac 120  
 accaaaggaa aagaaaacac gtacacacaa agtgaatata aaagtgttca agactgtgaa 180  
 ccgggaggtt cctggtatat ctacgttcat tgtacttagt taagttgatg ttactgttgt 240  
 tttttctcgc tgccgccatg ccatgagcan gccaggcang cagcttctca aacttgtgtt 300  
 gttgtaactt gtatgatggg agcttaagta cattactttg ttcc 344

<210> 7437  
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 <212> DNA  
 <213> *Triticum aestivum*

<223> Clone ID: LIB104-024-Q1-E1-E11

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 tcccttgctt gctgtttgaa taaaatacca agatctgaaa ttcttaaagtg ttagagagtc 180  
 ttcatatggt tgcataatta ttcgactact cattgatctt cacttatatc ttccggagta 240  
 gtgtgttatt gctctagtgc ttcacttata tatttttagag catggtggta gttttatttt 300

gaacaaatag atgaactctc atgattcact tagattatctt tgagaatctt aaatagcatg 360  
gtaatttgct taaaatccta atatgctagg tattcaagaa taataaaaatt ctcctatgag 420  
tgtgttg 427

<210> 7438  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-024-Q1-E1-E12  
<400> 7438

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gagaaagctt aagtagtggt gctcgggcat tccatcgaac acatcatgag cataggaggt 120  
gagctagagc accacaaagc cctcccctcg cgggccagaa aaaacagagt agtgtggagt 180  
gctctgcttg tcggcgaggg ggtatatata ggcacacat tgggtccggt tcgtgggttg 240  
aaccgggact aaaggtcacc ctttggttct ggttcaagcc accaaccgga accaatgggt 300  
gtgggccagg agcgaggcac attggtcccg gttcgagcct cgaaccggga ccaaagatgc 360  
cagatgaacc gagaccagtg cccacgatg gcccgccag cccctggcc tcacgaaccg 420  
ggacctatgg ccccatgggt cccggttctt ggctg 455

<210> 7439  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-E2  
<400> 7439

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aatatgtaga gactgatttc tgcaggactc atcttcttta gacctgaata aatatttctc 120  
acaaaccgaa attattttac aaagatctgt gtaacatgaa gctagcaacc caaatgttgt 180  
gtggaagtct gaagatgtgg taattcctgc atccgtaaag taatcttctg aagatgtggt 240  
aattcctggt aaaccttgct ccaggccaaa agagtgggtg ttgctctcca agaaaaagaa 300  
ggcttattga ttgcttgctt aagtgtttga aagatatcaa aacaatcgta tacaagatta 360

atgccagggc ataattggga gtacttagca aactggcagc tgaaacagag gtgttcctt 420  
gcntctactg tccttagcaa catgg 445

<210> 7440  
<211> 226  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-024-Q1-E1-E3

<400> 7440

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aaccgccgca acctccaagg aacctgccaa aaaggcccg cccttgagaa ccaaaacccc 120  
gaaaaccttc ttggaaccgc ccaaaaaccg ggaaaatggt aaaaaggggt tgccccctt 180  
gaaaaccaca accggaaaaa aacccaaaaa actcgttggg cccaag 226

<210> 7441  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-E4

<400> 7441

aacgacgaaa aaatgaggct atggtggtta tcaatgcaat ggtaaggatt agaaaaagat 60  
ttcatcaagg ttacggccaa ggtatccgtt tgaaagcatg gacggttggt ggcgattaac 120  
agtccttggc gaagatgagg agtggtagtg ttgatatagc accgtaccta tatagccgaa 180  
acacaatagg acacgaaacc acaactcaaa ttctcaaaga caaaaacggg ccaaaattga 240  
cggggatggt agcgggtgaag tgaagggtgt tcttgagaa atcgatggtg gtatcggagt 300  
gtgtatgcgg tgggtggagt ggaattgaag tgcgtatgcc ggagtgggtg ccgtggccga 360  
aaattttcgg gcgaaaaaaa agaagccaag gaagcccccc ccccaaaaaa aaagaggcca 420  
t 421

<210> 7442  
<211> 409  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-E7

<400>       7442

gggcgtactc tatatatatta ctaggcgcca tgtcggacaa cgacttgctg ggaaattgct   60

tcctgtatca ctgtatgtaa gtcttttagca aacacttaca catttgcgctg ttctacgcac   120

atcgtctaga atttcagtga ctttgcgcat catgacaaaa tttcagcagt tcacttgctg   180

gaattgccat tgtcgcaact tctgagagct cgcgcgcatggg gtgctttcca tctgacagcc   240

ttgtagctga attcaatcca cattcattgt ttatgatatc aagttgtaat tgttgagttg   300

taagaaaaaa gataagtgtg atgatcatca ttaatagaga cattgtcaca atgaggaaaa   360

gatgatggag actaggagtc acccacaagt cgggacgaga ctccagaaa               409

<210>       7443

<211>       279

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-E8

<400>       7443

cgggtgtaac ttaaagtgtt tcctctgtgc ctggctgtac atagacttgt ctgggacatt   60

gcttcgtgta ccactgtaag tgtgtcgtga cgtacacatt actagagatg agtgatacac   120

cacaaacgtc tatagattca gtgacattgc gcatcatgac aaaatttcag cagttcaatt   180

gaggggaattg cgattgtagc aacttctgag agctcgcgca tgggggtgctg tccatctgac   240

agccttatga ctgaattcaa tccaaagaca ttttttatg                       279

<210>       7444

<211>       434

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-E9

<400>       7444

cgggcctagc taacagtggg agtagtaggg gcgatgaggc ctcaatggca acacagccgg   60

ccactggagg caggagcagg cattctcccc ggcgctgggt tgggagggtg gtgcatgaag   120

ctgctgtctac cctgtctctc tcccgtgtgt cattgaaaca tctttctttc tgtgtgaatc 300  
 tgcaagactt ggccccttaa aaaaaaaaaa aaaaaaaaaa aaaaaaatta actaaaaaaaa 360  
 aaaaaacaac aaaaaaaaaa agcaaaaagt aataaaa 397

<210> 7447  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-024-Q1-E1-F11  
 <400> 7447

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 cttcggtacc gtgcaatgcc ctttctcacc ttcagagttg gtgcaaactt cgccggtgca 120  
 tccaaacccc gtgatacgat acgctctatc acacataaac ctccttatat cttcctcaaa 180  
 acagccacca tatctacca ttatggcatt tccatagcca ttccgagata tattgccatg 240  
 caactttcca ccattccgct catcattttc atgacatact ttacttttgt cacattgcca 300  
 ttgcatgata atgtagttga catcgtattt gtggcaaagc caccaagcat tatttttcgt 360  
 acatgtcact cttgattcat tgcaccatcc tggtacacca ccggaggcat tcatatagag 420  
 tcatatcttg ttctagtctc gagttgtaat ccttatg 457

<210> 7448  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-F12  
 <400> 7448

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 tataadccgg tgatcgctct ctaacagggt gacgaggagg ggatcgccgg gtaggattat 120  
 gctatgtgat gctacttggg gaacttacca tctattctct tctacatgct gcaagatgga 180  
 ggtggcctga agcgtagtct togacaggat tagctatccc cctcttatto tagcattcta 240  
 cagttcagtc catcgatatg gccctttaca catataacca tgcatatgta gtgtagctcc 300



ttgcttgcca gtactttgga tgagtactca cggttgcttt tgtccctctt tcccccttc 360  
 tatacctggg tgtagcaacc agatgctaga gtccaggagc tagagatccc gaggatgatt 420  
 ctacgtggag ttcggt 437

<210> 7449  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-F2  
 <400> 7449

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 ccccatgtgt ggaagagttg acatttttgg tatatatggc ccctgccctg ttggaacggg 120  
 tactgtctta atcagtgaca gtatattgtt agttaatacc cgagatgcag accttgggca 180  
 tgataacacc actacgtgtt gcaaattgca tctgagggtta cgtggctgga gtatcttgtt 240  
 gcgtcagatt cttttttattc ttcttcttct tctgaaaatg tacaaaatga atctgaacga 300  
 aggactatgc aaattatcgt gaaattttta tttttttgaa aaggggattg tcgtgaacgt 360  
 tgagaatttt aaaaattgaa tctgaatttt agtactttta cgagatgaaa tcgggtctga 420  
 aatgggagag cccgacagcg acgtactccc tccg 454

<210> 7450  
 <211> 218  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-024-Q1-E1-F4  
 <400> 7450

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 caaagagatt cgtccccctt gcaccaagct gccagaccta acaagaacat gcaacctggc 120  
 aatggggacc tcccacaaga aggaatgaat gggaatttcc tgaaaaaagg gccctgggg 180  
 taaaatggct aacccacat aatccccaaa agggggccc 218

<210> 7451  
 <211> 408  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-F5

<400>       7451

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gcatcaattg ataccagcac attccaactg tcattaggca tacattgtca tcgatagata   180

tatgcctttg aacttcatcg cagtacatct atgatcacta tggcgtaaaa caccaggagg   240

taccatgtca attcacacat tttgccagca tatctcattg agcttgtcaa tctactaaga   300

tgatagcagt tcttacatct tttataattc gacatcaatt actgtgatct ataattttac   360

agtgcattgt cacttatcac tatagtgtta cctattgcac acaacatg               408

<210>       7452

<211>       439

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-F6

<400>       7452

gggcacagtc aaacacgcgt cctacttgtc gccgtccaat ggtcggaac tctccgagg   60

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gttctactct tctcaccgg agaccgcacc ttcacttcac ggtcttgaa ccccgcccc   180

gtacatagag atgcagatg gaggacgttg gtcaccgccg tagaatagg ttaggatcgg   240

gtttctttta tttttctgtc ctataaaagt tcgaaatgta atgaaaatct ggcgtgtttg   300

cattaatctc ggctggtgta tatgaacttt cacaataata tacatattgt aggagtacta   360

gcaagatgcc cgtgcattgc acggaagatc aagatcttgt gggagaaaag gatgaacgag   420

ggaaaacctt atctgcaa   439

<210>       7453

<211>       449

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-024-Q1-E1-F7

<400> 7453

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agaacaaaag acaaagaacg tgtattagta cttgctgccca ctaataggcc gtttgatctt 120  
gatgaggctg ttattaggag gctcccaagg aggttgatgg tgaatttacc agacgcaacc 180  
aataggaaaa taattattag tgtaatacta gccaaagaag atttggcaga agatgtagat 240  
ctggaagcag tggccagctt gactgagggg tattcaggca gtgatctgaa gaatctgtgt 300  
attactgctg cacatcgctc cataagggaa ctccttgaaa aagagaagaa ggagagatcc 360  
ttagcagaag cagaaaacaa atcattgcct cctaagtatt ctagcagtga tgtccgtccc 420  
ctaaatatga gtgatctcaa acaggcaca 449

<210> 7454

<211> 274

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-F9

<400> 7454

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acatccgaat taccaagctt tccttccacg taaaggagag tcccattcgg atacgggatg 120  
aagtcttcta tcttgatctt tcatagtcca acagtctggc attcgcatat agtccggctg 180  
tccgaggacc ctcaatccag gactccctta gcaggcacta actagccact tcacaagccc 240  
aaattacctg ctgggaatgg ctttggcagg ccat 274

<210> 7455

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-G12

<400> 7455

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tttaggcgtg ggaggcggcg gagtggcggt ggagccggcc ggccagactc acaatcgatg 120  
gagaggggtg tgccggtcag agcgggaggc tgtgacagtg gggcgtggcg gaggtggtgc 180

cgtgcggccg gacgggatca tcctggtcga acaggctcgt gccccagggc tgctcaccgg 240  
 actccaattc ccaccgctct caagctctag atcgagcttc gtctggaccc atctatttgt 300  
 gcgatactgc gtttcctctg gtggccatct gttccgctca gcgtttcctc tgaatttgag 360  
 aggagaaggc cttgaggagg ttcatgcaac catggactgt ttagatgaga ttagttgaga 420  
 gaaaaggaaa at 432

<210> 7456  
 <211> 350  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 7456

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 aacaagaaac aagttagcac aaccacaatc cgtttcaata caatcctcaa ttcaattaag 120  
 gaaggcttgt tgacaatgat tatgtttagca acaattgaac aaacatctgg acaaaggccc 180  
 tgggggcgcg tcaaagttct cggaagatgc gactttaagc tcggcgatcat ggaagtatca 240  
 nacgggacac aggattaagg gggatgatntg ttgacctgtt aatcctggcg cccttgatc 300  
 tagtttaagt agttgtttct ttgcttttca aaactctacc gcatgtgcac 350

<210> 7457  
 <211> 359  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-024-Q1-E1-G3

<400> 7457

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 agacgttcat ggcagagtac cgtgactaaa ctggtgttac atgtgtggga ttacatgcaa 180  
 gcctcatgga ttttccttag gcgtttttgc ccgcgttgac agcagtatcc tgtagatgag 240  
 aaaaataag gcaaatccat ggcttgtgtg tgtgatacta tatcagatta ccagtctgat 300

gcctttgatg gcaaattggc aactgagaat ttttatttcc acanaanana nnnnnnnna 359

<210> 7458  
<211> 404  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-G4

<400> 7458

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tccctgaact ttcagttatg gttgcttata cagaagagag acggtcaata ttgtatgctt 180  
gtgtatgcta gtgaagtggc atgattcatt tttcttgtgt gtgcatgcta cttatagtgc 240  
aaaattgttc gcttgtatat gctactgtaa gtgcctatgt tgaagcacac tatttaagtt 300  
tgttttacac acagaacttc aactagaaac ttttgagaaa gtacgcccgc tttgtttttg 360  
tgaaaagttc aagtatgatt gtttgaaaag tacaaaaatg aatg 404

<210> 7459  
<211> 441  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-G5

<400> 7459

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cgaggatgat gaggaagaac aagaggagca ggagggtgga gggggtgacg acgatgatga 180  
tgacgacgac agcgacgatg acaatgagga cgacgacgat gatgacgatg gtgtcgtctgc 240  
tgaagacgat ggagatggag tagaagagga ggatgatgac gatgaggagg aggaggacga 300  
tgaggacttg ctccagcccc cgaagaagag gaagaagtga agcccttcga cgcggtctgt 360  
ttagtcacca tgcgacgaga tgtgctgtc cttcactgtg ttctggaaac tttccttaga 420  
gttaaaaatg cccccacacg a 441

<210> 7460

<211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-024-Q1-E1-G6  
  
 <400> 7460  
  
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 gtgttcgtcc gacgaagggt tcagggtgagc gcgccaagga ggtgagatgc caggatgccg 180  
 tgtgaggcgg cgagcacggc gagatgccga tgggtgctgcg tgagaagcgg caagacgtat 240  
 cagaggctgg agccgtgatg gactgcatca aattgggtcg ggtgaaccgg ccggtcgttc 300  
 tgtttgttgg actagctggt catgcgtgag ttcgtttagt cctagctgag agtatcgttg 360  
 ctagtagttg atgcatgcat gtagttggcc tggtcacaag tggttaccga gtcgtgtgca 420  
 acgctggagt gatttcagga gtggagta 448

<210> 7461  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-024-Q1-E1-G7  
  
 <400> 7461  
  
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 gtgttaaggt tgcacccctc ggctccgctg ctgcgccag agagaggaga gaggactgtt 120  
 aaatcatggg ctataacatg cctaaaggaa ctaatatctt cgttaatatc tttgtaattt 180  
 ctggggatcc caaatattgg gacaaccag aagagtacaa gccggagagc tttgagaaca 240  
 gcaacgtcga atattatggg acacattttg aattcgaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggaaaaaa 360  
 aaaaaaaaaa aaacaaaaaa aaaaagcggc ccctcaaaag g 401

<210> 7462  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H1

<400> 7462

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atctaccagc tgaagctgtt ctgtgacaag gactaccccg agaaggcacc atctgtttaga 180  
ttccattcaa gaatcaacat ggcttgtgtt aatcacgaga ctggggcggt tgacccgaag 240  
aagttcagtg tgctagcgaa ctggcagcga gagtacacta tggaaacatgt cttgacccag 300  
ctgaagaaag atatggcggc gacgcataac cgcaagctag tgcagcctcc agaagggaca 360  
ttcttctagc ggggtgtttg ctggcccacg tccagtttca acagcagcga tctatgtcac 420

<210> 7463

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H10

<400> 7463

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ttagagtcgt tctttcccat tttaccgtgt ttgcatggta agatgtttgg ttggatttga 120  
aggttcatag ccttggtccc aaagcttcaa gctcttatag aaattagaac tgagggcctt 180  
ttaaaatgag tcctgcataa tagtggtgtt cagtgggatg cagattgttt ggtaaatctga 240  
tcggctatcc ttggtgctga tttacgtact gatttcatca tcatatgact acaataaaga 300  
agttatgtgt ataaatatta cgaactgctg atactttgca tcagtgattt caattcaaaa 360  
aaaaaaaaa aaaaaaaaca aaaagaaaaa aaaaaacaac aaaaccaaaag aaaaag 416

<210> 7464

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H11

<400> 7464

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ctgggcacca tggataccga gtaccagggg gagaacctct ccacatctag gggcatggag 120  
gagcaagcca gaggggggtcc ctctcttccc tctctctcga tggcgtcaga atgccaccgg 180  
gggaaccatc tccgcagtaa tcgtctttat caacatcacc gtcttcatca cctccctaata 240  
ctcttttttag cgggtccactc tcccgcaacc cgctgtaatc ccctacttga atatgggtgct 300  
ttatgctata tattattacc caattatgtg tagccatcct atgatgtttg agtagattat 360  
ttttgtccta tgggttgatt tatgaacttg attggtttga gttgcatggt ttactttggt 420  
gttatectat ggtgccttct gtgacgcgcg ca 452

<210> 7465

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H12

<400> 7465

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tggccgctcg tattaaaaca tcttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggagg 120  
cccaaaagg tcaaacctta cttacccttg aatgcaaatt caaagccctt caaaagggcc 180  
cccaaatttc aattcacggg ccgtctttta aaaacttcgt aacgggaaaa acccgggggt 240  
tcccaaatta aacccccttg aagaaaatcc ccctttccca acttggttta ataccaaaaa 300  
ggccccacc gtttcccctt ccaaaaattt gccacccta aatggcaa at ggaaccccc 360  
ctgtaccggc ccataaacc cggcgggttt ggtggttaacc c 401

<210> 7466

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H5

<400> 7466

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acgtgctggt gatggaatct tcatgtctt gagagcattt gaagacacgg aaatcaccca 120  
tattgatgat acagttgatc ctgttcgtga tttggaaact attactcaag aactgaggct 180



caaggatata gagtttgtgc aggctaaaat tgatgacctt gagaaggcaa tgaagaggag 240  
 caatgacaag caacttaaga tagaccatga attatgtcag aggatcatga cacatcttca 300  
 agacgggaaa gacttacgtt tacgagaatg gaaagctgct gaaattgaga tcttgaatac 360  
 ctttcagctg cttactgcta agccagttgt ttatttgggtg aacatgagtg aaaaggacta 420  
 cctgagaaaa aagaacaagt t 441

<210> 7467  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-024-Q1-E1-H9

<400> 7467

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 aaccctgaaa gaagaaagac ggccctgccc ctgatgtttg gaaggaaagg ggcgtgtggt 120  
 agctgatgta atgttacacc gtagaatcat cgttcgtgac gataataatg atccgaccag 180  
 aactcctcta gtatcattgt tctgttgtca ttgtgtagtt tactctgtat ctgaactttg 240  
 ttttactcag cgaaaccgta ctgctatgat gaatgtgtcg atgtaaactg tggctgtcgt 300  
 gcctgtctga ctgatacatt gttcatgtag tcgatgaatg atagcacctg tgtcgtctca 360  
 gtttcaaaaa aaataagaaa ctaaaacaat aaagaaaaga aaaaaaaaaa aaaaaaactc 420  
 aaaaacaatt acataacact t 441

<210> 7468  
 <211> 130  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A1

<400> 7468

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 gaattagtgg 130

<210> 7469

<211> 365  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-A11  
  
 <400> 7469  
  
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 catccatctt ctgatttttg gacaagcaca cgctctttta tcctctccct ttcttctatc 120  
 cttcatgttt gtttacataa ctctgcaagt tcccacacaa cgacacgatg ctttagatga 180  
 tctatatcta ctcacgtggt aagaggattc gttcggatga cttactcttg ttttacccca 240  
 tacaagtaga tggaaagttg agacttggtt ttcttcatgt ggaagtgatg gtttgtagta 300  
 atatcctgaa aaaatgtggt tatgttcttc ttgttctaata tgaaatctgg tacgcaaacg 360  
 ccatg 365

<210> 7470  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-A2  
  
 <400> 7470  
  
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 gggagtcggc acgcagcaac gagggcgctcg aggaggcgcg gatcaagctg ctggagctgc 120  
 ggcaggtgaa caacgtgaag gcgctcgtcg ggccttcga gaccgtcatg gacgacagcc 180  
 aaagcatcgc caccgcacgc aagccgctgc tcaacctcca tgctgaact acgagtacat 240  
 tccaccagca tgaaactcga tcgctgcgc ctctccttt agcccggcta ctctttaatc 300  
 acccatcaac ccaatttgtc gtcgtcgac acttatctat aattacggta tcgcttatac 360  
 tttgcaacga ggaagatgat ggacgggtta tcatgatga ataata 405

<210> 7471  
 <211> 103  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-A3

<400> 7471

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acctggatgc ggtgctcacc acgataccac cagctgaaca tcc 103

<210> 7472

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A4

<400> 7472

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taatgttgaa agcaatatta tccaaacttt tacaccgaaa gaacacataa aagagtcctt 120  
ccggaacact ccagaatcgt caaaataagg aggtacgtga tacggtaagt aaacggactc 180  
caaaaaatct gcaaaaatat tttttatcga tcttggtata ttttaaaatt ttggaaataa 240  
agaaactccc aggaagcgtc acctgatggg cataatacac cagggtacgc caggctttcc 300  
tggcgcgccc aggtgagttg tgcccacctg ggacacctcc tgtatttcat ttttcttcca 360  
tgtacttgcc ctgcaagatt aaaaatctac ataaacttac caaacatggt aaccaccata 420  
tcacggagaa atcctctggt ctcttttctt gctattttct gacag 465

<210> 7473

<211> 378

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A5

<400> 7473

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gtttggattc ggattcaggt ttgatccaac ccaaaccac atcgtctgat ttggcaaggga 120  
tttgatcaac aactggggat cctgagttga atatgatatc aaatccggtg aattggtaca 180  
gtttcgggcc tggatagaag ctgtagtgat gccagattgg aaggcgggag agtttgaagg 240  
taaattcaac gatgaatttg ctcggggtaa tagcaacttg caagaagatg gagcaaggcc 300  
tttgaatatc tcaaataaga aactgaaaca tgggattaac actgaagaga acccgcaagg 360

tgtcgtgtct acaacaac

378

<210> 7474  
<211> 374  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-A6

<400> 7474

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gataatgagg tacgtgtgac cggttttaca ttcggggccag aaaatctgtc tttaaacttt 180  
ttaccgatct tggcaaattt gaaatctttg gaatatgatt caactctcag accacctttc 240  
cctgtatgag cataatagag gagcgcaagc catgctgtct agtcgcgta aagtaacttc 300  
tggatcatcag cgatatgcc tgaatggcaa tgttcttgca gctgtatgca ctgaaacatt 360  
gccccacttg actc 374

<210> 7475  
<211> 448  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-025-Q1-E1-A7

<400> 7475

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cgtcgtccaa cgagaaggac atcgaggaga tcaacgtgga ggatgacggg agtgctcgcca 120  
tcgcggatgc ctccgtgggc gtagtcacca aggaggatga cagtatcatc tcggccgatg 180  
ctccggcgat agagaaggac cagatcgaca cgctcgtgcc tgctccggca gccaaaggcca 240  
acgatgatgc cgggtgccacc ttcttggtg ccccggtggc cgggtgatgat ggcagtgctt 300  
ccttcgttgc tgcgccggcg gccaaaggagg acgaacttgt atccatctcg tctgctccgt 360  
tggcggagga gattganggt atcatcatgg cggctgctcc ggtcgtgac gatgttgatg 420  
ttgcaccttc ccggacgctc cggtggcc 448

<210> 7476  
 <211> 398  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-025-Q1-E1-A8  
  
 <400> 7476  
  
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 gcaagaaatg gtggagtaca ttacacaatg aagtgaaacg ttcatactctg atactctcat 120  
 tgaatcggac gtggaacaaa acgctgacaa tcaaattgcca gatgaccctt atgagggtcat 180  
 atcaatcttc atggatgaat tcagtcgcac gagaaggaac atcattggcc atgtctctgg 240  
 gtggttggtg agcgacagcc gcgaagataa gatcgatgat tttgtccagg aaatggatat 300  
 gacccgcttc tggacactag aaaggagaga agggatcgcc gaggtcctcc tcaagaatgt 360  
 ggacattaat actaagttcc actgccctga gaaatatg 398

<210> 7477  
 <211> 412  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-025-Q1-E1-A9  
  
 <400> 7477  
  
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 tgggtgctgt cgtggagtga acgatctgca tgcgcatagc cggttgcaac tgttgagtc 120  
 acgtgcatg tgcgcgcggc tggagggagt tagctgcatg ctacctatat ggttgagcgg 180  
 gtcattgtag tgcattgcaag gcgcagcccg gcgggtcacg tggatcatgca tggatatgga 240  
 tcgtgcatct aatggttagc ttaatgcgtg agttatttgc cgagtgtgca cgtcgtgtgg 300  
 tgtgtgtgca ccgtataag aaaccctccg tctatgtact gctcgagctg aaccggtgtg 360  
 taaccatgta accactgtta ggaagaaaag gattggggcg ttcattgtcc cg 412

<210> 7478  
 <211> 390  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> unsure at all n locations

<223> Clone ID: LIB104-025-Q1-E1-B1

<400> 7478

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tgtacactct gaaagggggc gtgtccaact tactcaagac caaaggagcg ctgagtgggt 180  
gggtaacctg tttgtgttcg acgaccggct ctccctgcca cgggccaagt ttgcangggc 240  
agaagtcgca gcagaagaag ggggtgccga caacggggat ctgtcatcgt ctcggtggct 300  
ggggcggtgc tacttgtgcg ggtccgangt ggaggagctg angcaacgca actgcgccag 360  
catcgactgc aaccgcctct acctgtgctg 390

<210> 7479

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-B11

<400> 7479

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ccctcgctt ggcctccctg tgggagatgg ccaccaacaa gcaagccgat gacacctacg 120  
gggagatcag cttctccaac ctctccggct tcaagtattt agttttcatt aacgctgtca 180  
ctgccgcta ttccgtgggc tccatcctga tgtcatcctt caagtccctc gctcgcttcg 240  
attggctcat tttcctcctg gatcaggcgg cggcgtacct gctggtgaca tcgtgctcgg 300  
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ttttcccc 369

<210> 7480

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-B12

<400> 7480

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ccggtgggca tattttcatc agggagtcct gcttccacca gtctggggat tccaagagga 120  
aagtgaacct gacgcactac cgggagccaa ggttttacac caaggtgttt aaggaatgcc 180  
actcctatga ccaagatggg aattcctttg agctttctct ggtaacttcc aagtgcattg 240  
gagcttatgt gaagagcaag aagaaccaga accagatatg ttggctatgg gagaagggtca 300  
agtgcacaga agacaaaggc tttcagagat tcctggacaa tgtgcagtac aaatccactg 360  
gaatcctgcg ttatgagcgc gtgtttgggg aaggttatgt cagcaccggt ggattcgaga 420  
ccacaaaaga atttgtggac aagctgga 448

<210> 7481  
<211> 278  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-B2

<400> 7481

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aagaggatcg gtgctccacc gtgctgcggc cgtgtggtgt tgggtgtgat tgtttgcttg 180  
ttgcagtggc tgcattcact ggctgggcac caagattcgt tagataagat aaatgtgcac 240  
gtacgtgctg tattcctgaa cttgtactgt gacgagcg 278

<210> 7482  
<211> 305  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-B3

<400> 7482

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tgccgcgcaa ctttcgccgg taccatacac ccaccattac cttcctcaac acagccacca 180  
tacctaccta ttatggcatt tccatagcca ttctgagata tatttccatg caactttcca 240  
ccgttctgtt tattatgaca cgcttcatca ttgtcatatt gctttgcatg atcatgtagt 300

tgaca

305

<210> 7483  
<211> 477  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-025-Q1-E1-B6  
  
<400> 7483

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ctgctgatct cggcgctggt cgcgcagatc cgcgcgtcgg atccgttggt ccacgagtcc 120  
ttcaacgaga gcttcgacgg gagctggatc gtgtccggca aggaggagta caaagggtgta 180  
tggaagcacg cgaagagtga tggccatgaa gactatggtc tccttggttag cgagccagcc 240  
aggaaatatg ccataatcaa agaacttgat taccagtta ctatgaagga tgagacagtt 300  
gtcctgcagt ttgaagtgag gcttcagaat ggccttgagt gtggagggtgc ttatatcaag 360  
tacatccgtc ctcaggctac cggatggaac gccaaaggact ttgacaatga tactccatac 420  
acaattatgt ttgggtcccga caagtgtggt tcaacgaaca acgttcactt catectg 477

<210> 7484  
<211> 458  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-025-Q1-E1-B9  
  
<400> 7484

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gcggtcagga ctcacggaca cggagctcca gcggtccggc catggcagcc gaactgcggg 120  
ggcgacggct aaacgacgat ggaacgggca gggtaagggg gaattgatac gtctccaacg 180  
tatctataat tttttattgt tccatgctat attatattct gttttggatg tttaatgggc 240  
tttattatac acttttatat ttttttggg actaacctat taaccggagg ccagcccaa 300  
attgctgttt ttgcttatt tcagtgtttc gcggaaaaag aatatcaaac ggagtccaaa 360  
cggaatgaaa cttttgggaa catgattttc ggaacaaacg tgatccagag gacttggagt 420  
ctacgtcaaa aatcaacgag gaaagcacga gcaagggg 458



<210> 7485  
 <211> 366  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-C1

<400> 7485

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gcgtggggcgt gtgcgcaagc gaggagcaga gaaaacaagg gagcctccgg cgcattgcag  180
cgggacggcg aaggagctcg ttggaggaaa ctccggcgac caaaagctac ggctgaggtg  240
cgcaaatgaa ccgcaacggg gacccgaact cgcgcatgtc tcgcacagca ccaagtgcag  300
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aacaca                                           366
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<210> 7486  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-C12

<400> 7486

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gatgctcaac gacgccgtct tcaccgacag cggcggtccc aaccaaagga agttcgagaa  180
ggatgacctc atcccgccca agccgggatc gtacgtcacc aggtcacgc gcttcgccgg  240
ctgcttgccg tgcaagcccg gcaagccctg ctaaactctg gtggccccgc cggccggccg  300
gagccgatcc cttccgaatc ttcaattctc tatatagctt tgttcaattc ttttactcaa  360
agattcgtgt atgtattact aggacatttg agtagtctac ggggttcaga tcagaggacc  420
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<210> 7487

<211> 313  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-C4  
  
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 gattgcccga tggcgaaggt gttgtggcgc tcggtgcaaa ttgcctttta cattactcct 180  
 tcaaatttgg tcaggctcgtt ttttggaacg tggctggttg gtatagaggc tgaaacagct 240  
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 attactcact ccg 313

<210> 7488  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-C6  
  
 <400> 7488  
  
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 ggagtatatt ccaatgatgg gcttcctcaa attgccctag gtctttgtga tgcacaccca 180  
 cttagtttct ttttgagctt tcatacactt atagctctag tgcacccggt gcacggcaat 240  
 ccctactcac tcacattgat atctgttgat gggcatctcc atagaccatt gatacaccta 300  
 gttgatgtga gagtcgttaa tagcatggta atttggcct tctttcttga tctctcatgc 360  
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<210> 7489  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-C7

<400> 7489  
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 accatgggaa caacacagac atgctctcct tgctcgtctt caaagcggct accaacgacc 180  
 caacaggcgt cctgcgatca tggaacagaa gcgtccgcca ctgcgactgg acgggtgtca 240  
 tttgcagctc accgaatttc aggcgcgtcg ttgccctgag aatccccggc caaagcttgt 300  
 caggggaagc caccaagctt ccgacaactc gattttcgag aacatgaact aagggggaac 360  
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 ttccaaggtg tcatacctcc atagattagt gag 453

<210> 7490  
 <211> 246  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-C8

<400> 7490  
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 tcagcctgac caaagacata acttttgaat gacttcacct ttgtcatgtt tgtaaattaa 180  
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 ttgttt 246

<210> 7491  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D2

<400> 7491  
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 gcataaggtc ttcaccttca gcattcagta agagtgttac ggcttgcaat ttagttccag 180

atcagctgcc ctgccaacac tagcaacaaa agcaaacagg gctgcaaacc cttaacggtt 240  
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 ggga 304

<210> 7492  
 <211> 286  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-D3

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 catggagaag aagttcgaaa caaagctcaa taacaagttt taatgaattg ctgcgcgcgc 180  
 ttccaccacc accaccggct ggccctaacg canctctaca acaacaaaca acaacatcaa 240  
 caaacaacgt cgtttttcca aatcaagtgg gaacaagcac aacgtg 286

<210> 7493  
 <211> 83  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D4

<400> 7493

cgggtcacgg gactgtcatg atgaggcgag agccggtcgc tgttcgagag gtttttgcga 60  
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<210> 7494  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-D7

<400> 7494

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actggatcaa cattataaag tatagtttcc tctttaagta gaactagttc tttaatttct 180  
tctttaatgg gtgggtgata tttaaaccac ttctccttat ggagttcaat atgggtagca 240  
aatgattcac aaaaggagggc tactatctca gagtcaagtc catatttagt gctaaacttt 300  
tgaaaagcat cagtatcaat aagagattta acacaatcat acttaagttt aatacctgac 360  
tctttacctt cgtcagagttc ccaatcttca gagttgcggt taattctttc caaaagattc 420  
caccggaatt caatagtct 439

<210> 7495

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-E10

<400> 7495

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ggcatatttt catcagggag tcttgcttcc accagtctgg ggattccaag aggaaagtga 120  
acccgacgca ctaccgggag ccaaggtttt acaccaaggt gtttaaggaa tgccactcct 180  
atgaccaaga tgggaattcc tttagacttt ctctggtaac ttccaagtgc attggagctt 240  
atgtgaagag caagaagaac cagaaccaga tatgttggct atgggagaag gtcaagtgca 300  
cagaagacaa aggctttcag agattcctgg acaatgtgca gtacaaatcc actggaatcc 360  
tgcgttatga gcgcgtgttt ggggaggggt atgtcagcaa cggtggattc gagaccacaa 420  
aagaatttgt ggacaagctg ga 442

<210> 7496

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-E11

<400> 7496

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gcctgcacag ctgcacagcc ggccgccgag gatagagcag gcagtcgcgc cggcgcttgt 120  
ttaagcggct ggagcatgaa gagcacatat tgaataagca cgactgtcat tggatggaca 180

tccaacagtc actgcttggtg tgtcaacatt tttttaacgac aacctcaagt ctgtggtaaa 240  
cagcatacat tccatctgcc attatttcta ataatttaca tcccatttgc taattcgtat 300  
gggttttttg gagcccagat tctttttgtt agcattacaa cccatattgt ggcacacggt 360  
aaaccactat acgaaatttt gcataattca gtgctgtcca aactattttt aatcccacaa 420  
tttcgagtca gattcagact gatttta 447

<210> 7497

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-E2

<400> 7497

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ttagtcaata gaagcttaat tatagaaaat tgtggaaaca aagcccatgt tctcatctgt 120  
aagtggctag ttcacaataa tgtcatattc ctaggaaaat tataaatcac tatgggggta 180  
agcgggttagg cacaattttc taaaaatgta ttattttcaa taaacgaaca taccaatcca 240  
caaatagtgg acgcaccaac agaagatttg atgccagcac agtaactcat gagtgaacct 300  
gttataacaa tttcgacaat acaaagattc ggctatcaaa tgaatactac aaaaattaca 360  
aatattattc gttatccaaa agggaaaagt aaaagatgaa gaaacaccta cct 413

<210> 7498

<211> 374

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-025-Q1-E1-E3

<400> 7498

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ttttttcatg taattctttg accgcagcag cagcttaacc ttagagcaga acacattact 120  
ggctacttat tatgagtttt gtgaaatttg catcatgttt gtatatggta gaagtgtggc 180  
agtggatgat gaattgaatt gactaagtta gagtgaagtg tttggttgaa gattgcggta 240

ttgcatttgc cagaancaaa ntaactcatg aatgaacctg ttataacaat ttcaacaata 300  
 caaacattcc gctagcactt ttctcgagca aaaatacaaa atattactcg ttaaccaaca 360  
 ggggaaaagt caaa 374

<210> 7499  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-E4  
 <400> 7499

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 cccggttggc atcccacctt tcgtcttcaa caactatcgg ttagtatcgg ccgatcctaa 120  
 gtttttgctt attcacatga tgtttaccat tcttagaatg tcatttttctt ttgctttgat 180  
 tgatgtttga ataataacc aagatatgaa attattaaat gttagagagt cttcacatag 240  
 ctaaataatt atttaactac tcattgatct tcacttatat ctttcggagt agtttgtcat 300  
 tgctctagtg cttcacttat atcttttttag agcacggtgg tggttttatt ttgtagaaat 360  
 agatgaactc tcatgggtca cttatatcaa tttgagagta tttagaacag ca 412

<210> 7500  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-E6  
 <400> 7500

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 ttctggaaat aaaacgagaa cgaaacgtcg gcgcaacgga caacggactt cgactcggag 120  
 acagcaatca cgctgtagtt tcaagacgaa cttcttttctt aaaatcgagc aggagcaatc 180  
 gccgaaccac gcccgtgcc tcagtccgac cacggcccgcc tcctcgattt cgcaaggtga 240  
 acatgcgcac gatgggtttg ggattgggag cgccgttctt cctcctcgtc ctctctttgc 300  
 tggccgctgg cactggagct gtgccgcagg acaagatggt tcgcatgaat tatgttcttc 360  
 tcgatctcaa tacaatcgag atccgcccaa atgacaagga ggaaattgcc tctagcaaaa 420

ttcctgt 427

<210> 7501  
<211> 267  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-E7

<400> 7501

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ttccgtaacc cctcccgaag gtcaactgaa ccttgtaagt agatatccgg aaccaacc 120  
aatccttttc ctttttttcg gaaaaaccaa caagagcaat ctccgaaaca agcccgatga 180  
gccaatctcg aacaaagagc acacaaaaag gggccgctca agaatactaa ctcttaatga 240  
ctcgtaaatag gaatgtcata cctcttc 267

<210> 7502  
<211> 262  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-025-Q1-E1-E8

<400> 7502

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tcttccggag taccgggaca attgctaaac cataataaca aactgggaag aattcaacaa 120  
caggctccag gccaaaccaga gcaacacggt gctgtgaatt aagaggcgag caagaaggac 180  
ctgaagagcc ggggcttggt cctcgtccca atctcgtgca cgtcccactt tggcggggac 240  
aacgctgctg actactgggc cc 262

<210> 7503  
<211> 448  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-E9

<400> 7503

tccaaaattc ccgggtccac ggggcgtccc gaccctcac tcataaacat acacgtaacc 60



cagaagaccg ttctgtcacg tatacacaac gtatcggcat ctgtctatgt cccactcaag 120  
catgataatt tgcacaatca gaactcaatg tctggatcac aggcacagga tcgcgagatt 180  
ggcgtccgg cagaagacaa atacggacag agatacacgt cacctctcaa tgaagcagac 240  
aaatagagta ataagtgaac taacgcgcaa ctaaaacgtc tagctcgagt ctcttacagg 300  
ttggagctaa attcatctat atggaaatat tgtagcttcg agaactttcg taggagtctc 360  
ggtagcataa atactatgaa agtacaaatg gtagaataat gttccaggat tggtttagat 420  
acatcgagat gttaagtgga tcgatttc 448

<210> 7504  
<211> 312  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-F1

<400> 7504

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attgagtaac tgagtgggtgt gaatgcatgt ctcatacaac ccttgagaaa tatgacataa 120  
tgcaatgtat ctcaagttaa aattcccaag tcatgtgata tatcaagatg aaaaatggta 180  
tggggcctta ctaatgcaa cctaaaatgc atacaagtct caagtcaatc tattgatcct 240  
aagctagaac atttcatata taagataaaa gatcaagtgc caatgtttcc cttcgcatgt 300  
tacaaaatgt ta 312

<210> 7505  
<211> 372  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-F10

<400> 7505

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tattgaatac tccaccatctt gagggtagat atgttcctga taggtatctt acttgggagt 120  
tagatactga acaacgattt acatgtttac aatatcctga ggagagacga gttgctgctg 180  
ctgtttgtgc tttcactagt tttgcatgtg tatgggtggtc tgaacattgc agattatctc 240

ctattcgacc tatctgggct gcttttgaaa gttctatgcg taccattcg gttcaacata 300  
 ttttcaacgt gcattgcttc aaaatttgca gcgtttaagt acaagggaaa acttccggtc 360  
 atcaatatta tc 372

<210> 7506  
 <211> 256  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-F4

<400> 7506

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 ctgaagcccg gtgggcatat tttcatcang gaatcgtgct tccaacagtc tggggattcc 120  
 aagangaaaag tgaacccgac gcactaccgg gagccgagggt tctacaccaa ggtgtttaag 180  
 gaatgccact cctaattgaca anangngaatt tcctttgagc tttctctggt aacttcaaag 240  
 tgcattggag cttatg 256

<210> 7507  
 <211> 351  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-F5

<400> 7507

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 aaaagccgga ctgaggatct taaaagatat acgcaggagt cataaaaata tgtcaatatg 120  
 ggattgcagg ctgcactgct gacctctgcc gcactgactg cggagggtcaa tactttgaag 180  
 caaatctcg agcgggtcaa gaacgagctc ggccgtgcc aagaagcagct cgaggacaag 240  
 gaaggtgagt aacaccttat taaaattgta ccttacataa aaggattttg gttgaagaat 300  
 gacaaggata acgtgggaat tgcangggcc actaacgagg tggtgaccct g 351

<210> 7508  
 <211> 409

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-F6  
  
 <400> 7508  
  
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 tgcgtgctgg tgagaactcc tttgacggct ccgcagccca tcaagacatc tctattgtgg 180  
 atgtcgcgta acggcgagac ctctctagtt cttttgcgac cttgggtcatt gtccttggg 240  
 tatatgtcat ccaaaactcc tcctatcggc catggcggaa tgacttgaca agtaagaact 300  
 attttgtag tgattaagat acgaaacgtt gagttaattt ctagtgggta attttaaac 360  
 ccggtgctaa gtgttaacat gtttaagttt gattcgtgtg aacaaattt 409

<210> 7509  
 <211> 316  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-G1  
  
 <400> 7509  
  
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 gatcacgac gtcgcgcang agggctgctt tccatgcgac acgcangagt ggaggtgaaa 180  
 gcaggcaggc tagtaaacia acaaagagcc aaagaagaag ctgatggctc ctcgttttgg 240  
 ccgggctatg catcacagca caaggccaca ccacaccaga gatgattagt ttagtctaac 300  
 agttaacacc agatga 316

<210> 7510  
 <211> 452  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-025-Q1-E1-G11  
  
 <400> 7510

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 accggtcgta cctgagcgcg gaggagaggc tgcgtcgctt ccgggtgtac cgcgacaacg 120  
 tggagtacat cgacgccacc aaccggcgcg ggcacctcac ctacgagctc ggcgagaatg 180  
 agttcgccga cctcaccag gaggagtcc tagccaggta cgcgtcgctc tacgatgggg 240  
 tcggtgatga tactggcatc acgttgctg tggggcgtgg cgacgccgag ctgtggtcgt 300  
 ccggcgccga caatgatagc tccttgagg ctccgcctcc cagctgggac tggagatcca 360  
 agggcgccgt cacaccgtc aagtccaat gcgcaggatg cgctagctgc tgggcgttcg 420  
 tgacggttgc gacgatcgag actctgaact gg 452

<210> 7511  
 <211> 86  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-G2  
 <400> 7511

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 acggtttgcc tgagtttgct ccatat 86

<210> 7512  
 <211> 220  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-G3  
 <400> 7512

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 cgccattggt gtatctacgt gtcattatgg tactcattgc tttgtgtcat attgtgttcg 120  
 tccggtatta gctctcttac agaacgtttc gattgaatgc cttgcctggt ggttcgtaac 180  
 cgaccatcat tacttcgtat gatcttcgct attactggct 220

<210> 7513  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-G5

<400> 7513

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caaacccttc gcatgggctc gccgtgcatt tgtatggtct ggagaagctt acttgtctta 120  
tagtttagct gctttatctg tctttggttt tatcgcttgt tgttttgtat ggttcaataa 180  
tacagcttat ccgagtgagt tttatggacc caccgggcca gaagcttctc atgctcaagc 240  
atttactttt ctagttagag atcatcgtct tggagctaata gtgggatccg ctcaaggacc 300  
cacacgttta agtaaataatc taatgcgttc cccaactggg gaggttatct tttgaggggg 360  
aaactatgcg tgtttgggac cttcgtgctc catggttaca agctctaagg ggcccc 416

<210> 7514

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-G6

<400> 7514

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attgaaacta taacgcctga gactatccaa tagaagaaag agccacaagc aagccatagc 120  
agcatccttt ttcttgcgtt tcttcaacaa tttatctacc tcaactcctca tcataactca 180  
aatgctcgtc ttgactctat catatcttcc ttgcatatgc atcacatcat aatttcaagc 240  
tttatcagat ggagtgaaga gtacactttt agtggtcctc ttagtgagtt ggtttatgtc 300  
aaacaacctc ccggttttga aaaaccccca tcacatttaa caactccatg aagcgctcta 360  
tggactcaaa caagcatctg gtgcttggtg tgatcacctt aagacgtatc taaacgagaa 420  
gggggt 426

<210> 7515

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-G7

<400> 7515

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 gcgttcatca acaatttata tacctcaatc ctcagcataa ctcaaatgct cctcttgact 180  
 ctatcatatc ttccttgcat atgcatcaca tcataatttc aagctttatc agatggagtg 240  
 aagagtacac ttttagtggg cctcttagtg agttgggtta tgtcacacaa cctcccgggt 300  
 ttgaaaaacc gcgatacatt taccaactcc atgaggcgct ccatgggccc aaacaagcat 360

<210> 7516  
 <211> 134  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-H1

<400> 7516

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 tccttcgaaa tttgggaaaa taagcaatca aatttaacct ggcaactaaa ttccaatcca 120  
 atttgaatc ccaa 134

<210> 7517  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-H10

<400> 7517

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 gaagtgggtt agacttaaata gtgctagtca tattcttcat gatgctctct ttatgtttca 120  
 attcttatct tttatgtgag tatcattgaa atcatcatgc ctagctaggg gcgtcaaacg 180  
 atagcgcttg ttgggaggca gcccaacttt atttttgttc cttgattttt gctcctgttt 240  
 agtagtaaata attttaccta gcctctgttt agatgtgggt ttatactttt aattagtgtc 300  
 tgtgccaaagt agaacctttg ggaagacttg ggaaaagtct ttgcgatcat gctgtaaaaa 360  
 aatagaaact ttagcgctct cgagaattgc tgccattttt tattggagag tgctattta 419

<210> 7518

<211> 324  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-025-Q1-E1-H2

<400> 7518

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 tcttccttgt ccanattcaa cttaaatttct caagttttta ataaataaag ggtaatcaaa 120  
 atcatagaag atgtccaaga taatataatt gtatgtgaaa agttccctcc ctatactaata 180  
 cattcaagaa tttcttgtat gatcaatatt gtcattgtca agcttcaaaa gatttcactt 240  
 tctaaaccca atgtgaagcc aatactaagc atgatatgaa catataattt caaattcatg 300  
 atattcaatt cattcaacaa tttt 324

<210> 7519  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-H4

<400> 7519

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 aaaatagagt gaagttcaag tagacatgcc gagaagttca agttcttcac gcggcgcat 120  
 ttcgaagaat ttgttttgcg ataaaggcag aacgaatgat ctgccattt ttgaaattac 180  
 ttgaaaacga ccaggaatca gagaaaacca tcaacatgaa aaagtttcgc attttccgta 240  
 gcttttcaac ggtatattat ttgccccatt ccgataaaact ttgcagaaaa tacggcaaaa 300  
 aatatgtttt taaccatttt cagaactaac ata 333

<210> 7520  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-H5

<400> 7520

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actacattac acaaagaagt gaaacgttca tagctgatac tctcattgaa tcggaggtgg 120  
aacaaaacgc tgacaatcaa atgccagatg acccttatga ggtcatatca atcttcatgg 180  
atgatttcag tcgcacgaaa aggaacatca ttggccatgt ctctgggtgg ttgttgagcg 240  
acagccgcga agataagatc gatgattttg tccaggaaat ggatatgacc cgcttctggc 300  
cactagaaag gagagaaggg atcgccgagg tcctcctcaa gaatgtggac attaaaacta 360  
agttccactg ccctgagaaa tatgaaaacg aggaacgtct tgctgatcac aaggcacagt 420  
gtagcttcag gcctgtcact tggccgaacg a 451

<210> 7521

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-H6

<400> 7521

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ccccacccta tgtgggggttc aacaaggcga ccccttctcc ccgttcctat tcaacatggc 120  
cgtggacgcc cttgccacca tcctggataa ggcgaaggct gctagccata ttcgtggaat 180  
cacccccacc ttgccggagg gtccgggatt tcctcctct agtatgccga cgacaccatc 240  
atcatggctg aaggctcgga ggcgaacatt tccaacctca agttcctcct cctctacttc 300  
caacaaatgt ctggccttaa gattaacttt gacaagagtg atgttatggc gatgggcatg 360  
aggagtgtct agccattgcc aaccggctta actgccgcct gggctccttt cccatgacct 420  
ac 422

<210> 7522

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-025-Q1-E1-H7

<400> 7522

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atggtgcggc atgtctttaa cctaaatggc atcaaaggag caattgctgc ggctcgaaag 120



ttgcctgata ttgctgttca agctgatgtt gttagtactc tcaagggaaa acttggctctt 180  
 ttcaacctag atattttctc aagccttctg cctgttcttg ccgggttact gaacagcaaa 240  
 actgaaaggc atgctattgt tgctttggag atgttattgg atcttataaa gatTTTTTgga 300  
 ccggttattc attcaacatt gtcaagtagt tcacctgttg gagtagatct tcaagctgaa 360  
 cagaggttgc agcgttgac ccggtgtttt aaccatttgc aaaagattgt gcaagctcta 420  
 caccggtga tga 433

<210> 7523  
 <211> 325  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-025-Q1-E1-H8  
 <400> 7523

ccgcatttat catggtagtc aatacgcgga tcgccaagct aaagatagaa cgggatcgac 60  
 atagtatcat aggcagcaga tgagtaatcg ctgaggaccc gaacttacat gatatcgcg 120  
 tgcaatctga gattgctagt actcacagt taggattagc cttgtcagcc tacagagttt 180  
 cgcattggcat ccgcctattc ttggggagac acatggaacc acagcttatg cagatagcac 240  
 tgttgcctag gctatggat ggccctgtaa agcaactcct cgtacggcta gtccatcagc 300  
 aattttacgt ggttcaactg ttgga 325

<210> 7524  
 <211> 211  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-A11  
 <400> 7524

gggcgacagt ataatcacia gaaatatata tataggataa taaggtgggtg tattgccgcc 60  
 atgtccgtta acctgagggt ggttccacca aaaaaaacccg ttacccccgc caaaatttt 120  
 ccgaccaag ggaaaataat aacaacggga aaaccacca aaatcaaacc ggcttgtgaa 180  
 ataaatgggt gcgccccggt tttttgtgc c 211

<210> 7525  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-A2  
  
 <400> 7525  
  
 ggtcgtaatt acgggtccac gggcatcacg gccaaagagac cgtggaacgg agacggcgtc 60  
 ctgggtccac aaggctcctc cgggggggttg gtttccccta acggaacccc ggctgggaac 120  
 cccttcgccc ggggcccggg tttttacaaa ttaagggtccc cgtcggtcct ggaagccctg 180  
 cctttccgct ggaaccgcga catacacgcg tgcttaaagg tgagcgacgg ccagctgcgc 240  
 tacgttcaga tccatggtgc atctgagaag ccgggtggtca gcatctggac gctgtcatcc 300  
 agtgattcgt caaaggcgac atggggaagc ccgaccagcc tccccttga tgtggttttg 360  
 ggaagacagc aactacagtg atgatccccg gttcgtccgg gggtcgtccc tgctttgcgc 420  
 ctggtccacc ccatg 435

<210> 7526  
 <211> 111  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-A3  
  
 <400> 7526  
  
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 ggggttgtgg cagtgtcccc gngagttgag ctcccagagg gttgtcgtca t 111

<210> 7527  
 <211> 462  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-A5  
  
 <400> 7527  
  
 cggggccacg gatacagaag acgaacaggt gagtggagag aaaaggatgg gagacgaaat 60  
 atctgtacag cttatcatgt tctctgtccc cagttcccta tctgaccacc ccagcttgca 120

acagtagcaa attgatgcct gtcgtgtcca gttgagcaga tgagagatca aatgagcatt 180  
 tcccgtggcc tctataacaa ctagcaagta aggattcatc gacttttact tctttttgtg 240  
 gatccaaacc atgatgtctt tattgtatac taacatgatt tttctgccgt agatgactcc 300  
 accgtgcttg atgtaccgga cacattgctt gatcacactc attgtattta ccttttccct 360  
 aatgctttat tatgtttttc ttgagaccaa gctaagtcac ttaagctgat gttttgccag 420  
 atcgtctttt gggttaatcat ctcatgcaca tatcaacaaa aa 462

<210> 7528  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-A6

<400> 7528

ttcgcgggtc cacgggcaga ttggcatgag ccctgccgag gcgggcgagt acaacaaata 60  
 tatcattcgt gaggttagtt ccgggtcagg cacaccgctc atgccaaagc ggaagttcga 120  
 gacgtacata ttcacgtctt tcaacgagga cctcaagccc gggcccgtgg ccgagcgcaa 180  
 tttcgggatg ttccagccag acttcacgcc gatgtatgac attggcatca tgaaagatcc 240  
 ggtcaaaaaca acatcgggcg cagcgctcggc cgtcccagcg gtgccgcaga aagtgcacgc 300  
 aatgcctatg gtcgctgctg ctaatgcctt ggaagctgga gtgcctacaa aggccaacga 360  
 ctccaacaac gcctagggat ccacgcaagc atcgtcgcca ggcaacaaat ccttgaccga 420  
 tgac 424

<210> 7529  
 <211> 340  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-A7

<400> 7529

gggtccacgg ggagcacaga aaggacggcg agcacaagga gggcatgatg gagaagatca 60  
 aggacaagat cagcggcgac ggccacggcg acggcaagaa ggacggcgac cacaaggaga 120  
 agaaggacaa gaagaagaag aaggacaaga agcacggcga gggccacaag gacgacgacg 180

accaccacaa caccatcatc gcatccatt agcattctac cattttcctc ggagagaagt 240  
 agccagaaac agcagcgcca tggccggcat catgcacaag atcgaggaga agctccacat 300  
 ggggtggcggc agcgacgagc acaagaagga cgatgagcac 340

<210> 7530  
 <211> 313  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-A8  
 <400> 7530

cggggagAAC agaaaggact gtgagcacia ggagggcatg atggagaata tcaatgataa 60  
 gatcagcggc gacggccact gcgacggcaa taaggacggc gaccataagg acatgaatga 120  
 caagacgatt aagaaggaca ctaagcacgg cgaggggtcac aaggacgact atgaccacca 180  
 caccaccatc atctcatccc attatcattc taccattttc ctcggcgtga agtaaccata 240  
 atcagcagcg ccatggccgg catcatgcac atgatcgagg agaagctcca catgggtggc 300  
 ggcagcgacg atc 313

<210> 7531  
 <211> 370  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-A9  
 <400> 7531

gggtctgcaa ctatacagct tcgtatgtag ttgcagatc actacgtcat tctgtacatg 60  
 ctgcttccat gctccacttg gagatattcc aaatgggttg ttccactata cgtatccggt 120  
 ttgctactta gagtcactca gataggtgtc aaagcttgca tcgacgcaac tctttacgtc 180  
 atcctcatta tcagctccat atccgagaag catatccgta ttctctaat gatagttttg 240  
 accgctatct ggtgatctac tccttgataa cctttgtatc ctcttgccag atatgtatca 300  
 gggcacacat caagtgcggt acttataata ccgtagagcc gatgtctgaa gcataagggg 360  
 ctaccttcgt 370

<210> 7532

<211> 366  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-B1  
  
 <400> 7532

```

gggtccacggg cccaatggtg catgaatcag atatccagca cggtgtgtca tcatggactg   60
gcattccagt ggagaaagtc tcgacagacg aatctgataa acttcttaag atggaagaga  120
cattgcataa gcgtgtcatc ggccaagatg aggctgtgaa agcaataagc cggtccgttc   180
gccgtgctcg tgtgggcctc aagagcccca acagaccaat tgcgagcttc atttttgcag   240
gtcccactgg tggtgggaaa tcagagcttg caaagacgct ggcatcatat tacttcggct   300
ctgaagaagc catgatccgg ctggatatga gtgagttcat ggagaggcac actgtgtcca   360
agttga                                                                    366
  
```

<210> 7533  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-B10  
  
 <400> 7533

```

gggtcaattc caacgagtct gtaactgcag cgaggcgagc gtctgggaca tgcattagta   60
catgcgatta gataatcagt aacacaaacc cacaaacggc aacctgccct tgattagata  120
atgccatata aaatccgatg gatggaacaa caaggtagct gcagctgcat gcatgtaaaa  180
ttgagtccat atccacgagt aaaggctgct gcatgcatat ggcagcaagc cagccagcca  240
gtgtacgtgc agctgcagcg aggcaaaggg cctggatggc tccggcactc ttcggccttc  300
ccgaagtcga agatcacttt tcggtcaaca gtaagttgaa gttactatth tcagcccagc  360
tgaccacttt tccgccgatt ggaggctaaa aagctc                                                                    396
  
```

<210> 7534  
 <211> 312  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-B11

<400> 7534

ggggagaagg gcattggaga tggaacggtc agctatggaa tggatgatgc tgatgacata 60  
tacatgcggg catggactgg caccattatt ggccctcaca atactgtcca tgaggggtcgc 120  
atctaccacc tgaagctgtt ctgtgacaag gactaccccg agaaggcacc atctgtttaga 180  
tttcattcaa gaatcaacat ggcttgtgtt aatcacgaga ccggggcggt tgacccgaag 240  
aagttcagtg tgctggcgaa ctggcagcga gagtacacta tggaacatgt cttgaccag 300  
ctgaagaaag at 312

<210> 7535

<211> 392

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-B12

<400> 7535

ttcacgggtg cacgggaaac taataagatg taaaatagac ccaggggcca taggtttcac 60  
tagtggcttc tctcaagata gcataactat tacgggtgggt gaacanatta ctgccgagca 120  
attgatagan aagcacgtag ttatgatgat atctaaggca atgatcatga atataggcat 180  
cacgtccgtg acanagtaga canaacgatt ctgcatctac tactattact ccacacatcg 240  
accgctatcc agcatgcac tagagtatta agttcataag aacggagtaa cgcattagggc 300  
aagatgacat aatgtaaaag gataaactca ngcaatatga tataaacccc atctttttat 360  
cctcgattgc aacaatacaa tacgtgttgt tt 392

<210> 7536

<211> 336

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-B2

<400> 7536

ggggccacgg ggtttaccac aatcatcctt gctgtacaca ccttttggga taagcctatt 60  
tgataagaat ttgcagaaaa acccaagtgc ctcaattata acctttgggc ctgaaaattt 120  
tggcccaatg cttcaattat atgtttttaga gcacgatggg ggtgtcttaa ttttgaagaa 180

attgctagtc tctcatgatt cacttatatc attttgagag tcttttagaa cagcatggta 240  
 tttgcttttg ttacaaagtt ggtcctagaa tgatgagcat ccaagttggg tataataaaa 300  
 actatcataa ggaagtaa at tggatgctat gattaa 336

<210> 7537  
 <211> 360  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-B3  
 <400> 7537

ggccgggaat cacttataga cttctacact agctctggga agcgaaagcc agaccaagtt 60  
 attattttca gggatggagt tagcgaaagc cagtttactc aagtgataaa cattgagctt 120  
 gagcagatca ttgagggcatg caagtgcctt gacgacaagt gggagcccaa gttcacggcc 180  
 attgtcgctc agaaaaacat cataccaggt tttccagac aaactcgcca gaaaatgttc 240  
 ctctggcac tatggtggat aaacaagtgt gccatcccaa gaactttgac ttctacatgt 300  
 gcgcgcatgc tgggatgatt ggcacgtcga ggccaacgca ttaccatgtt ctgcatgatg 360

<210> 7538  
 <211> 328  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-B4  
 <400> 7538

gggtccacgg gttgatcctg atgaaaatca gaaacttttg aaccagtaa attagttttt 60  
 ttaattcaca taaacgtgat tttgatcgta ttctttttga tctggattgg taaaacatt 120  
 tctaaggtct tccaaatttg gaaaaatttt tggagttcca gaagtatgag tttgatgcaa 180  
 atggcaaaaa acggtccggt tttgacaagg tccccctttc aaggggtggg tgccataatt 240  
 gaagcaacca aggctaataa aataatttat aaaccataga taagttggga tacaatatgg 300  
 ttaacacaca aataaataaa gaaagagt 328

<210> 7539  
 <211> 457

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-B5  
 <400> 7539

```

gggtccacta ggccgtgtca gatcatcacg tgagacggac tagtcatcgt cgggtgaacat   60
tctcatgttg atcgtatctt ccatacgact cgtgttcgac ctttcggtct ccgtgttccg   120
aggccatgtc tgcacatgct aggtcgtca agttaaccct aagtgttttt gctgtgtaaa   180
actgtcttac acccgttgta tgtgaacgta agaatccatc acacccgatc atcatgtggt   240
gcttagaagc gacgaactgt agcaacggcg cacagttagg ggagaacact tcttgaaatt   300
tttgtaaggg atcatcttat ttactactgt cgtcctaagt aaacaagatg cataaacata   360
ataaacatca catgcaatta tatagttgtg acatgatatg gccaatatca tatagctcca   420
ttgatcttca tcttcggggc tcctgatca tcttgtc                               457

```

<210> 7540  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-B6  
 <400> 7540

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ttcgccggtc cacgggacga caagacgccg gatgtcccgg agcaggccga tgcgtatgga   60
cgtgagttgg tggatgaatga agggcctgtt acaatagagg gtaagccgat ggatgtccat   120
cccacaatgg aagatggcaa tgtgcaggat gttgccgtgg aggcagaaaa tactactcgg   180
gcttcataaa tcagaagagt ggatgcaaga tcagcaattg gtacaaaaat tctctgtgct   240
tggtgtccat atgggtgaag aataaagaac ttagaggtgg ttgtagaatg tgacgaacag   300
cagtgtgctg tgcgcctctg cactcgtagc taagtgagt accatgttgt aagatggatt   360
tctggacaaa tcaggtgtaa agatgtaaga ttcccaaaca atctgtacgt atatatatatc   420
ccagact                                           427

```

<210> 7541  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-026-Q1-E1-B7

<400> 7541

tgacgggcct caagctctac tgatgctatt atggctgaag cagaacttac cttaaagtct 60  
cctgctgatg ttgacgcaga tctactgaag gatgatgatg atgctcagct actacagcaa 120  
gcactcgcta tgtcaatgga tgaggggtgct tcaggagctg caaccgtggc tgatgctgct 180  
atggcagaag ctgctgcata tgaccaggat ttggcattgg ctcttcaa at gtctgtccat 240  
gatgcagatg cggctggcca atctgatatg agcaaagtgt ttgaagacag atcatttgtg 300  
acatccatcc ttaattcgct tcctgggtgtt gggcccaatg acccatctgt gacagattca 360  
ctggcatctt tgc 373

<210> 7542

<211> 312

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-B8

<400> 7542

ccacggggag ccataaaaaa catgctcagt ctccgctggc cgggtgtccaa gagcaaccca 60  
agccaagaac caacctgccg ggggcaatgg aaacaattta agttaatggg aaattgtggg 120  
cgctcacagg gtcaagggtta cctgcacaat gctagccacg tacttactta cagtgcattg 180  
gccatacata caacacatgg acacttacac aaatggcaca tgtgagacac tcccgggggc 240  
aggcacccta aactatgtgt acaatttacc tgtggggcctt acgtgctttt atgaggaggt 300  
aaaccctgt gt 312

<210> 7543

<211> 434

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-B9

<400> 7543

attccgggtc caatggaaaa tggaatcagg agtggcaaga gcctaagctt ggggatgccc 60

aatgcacccc aaggtaatat taaaggacaa ccaaaagcct aagcttgagg atgcccaga 120  
 angcatcccc tctttcgtct cegttcatcg gtaactttac atggagctat aattttattc 180  
 accacatgat atgtgttttg cttggagcgt ctttttttgc ttgttggttg aataatatcc 240  
 caaaatctga aattcttaaa tgtagagag tcttcgcaa gttacataat tatttagcta 300  
 ctcatgggtc ttcacttata tctttcggag tagtttggtg tttgctctag tgcttcactt 360  
 atatatTTTT agagcacgac ggtgggttta ttttgaagaa atagatgaac tatcgtgctt 420  
 cacttatatt attt 434

<210> 7544  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-C1  
 <400> 7544

ttcacgggtc cacggcgagt gcgacaaagg tgccatggcc gccatagccc agtctgcgcc 60  
 ggattctgtg ctgatgacat tggcggagtt tgagacggca agagaggtgt ggaatgcact 120  
 caaagagatg aggattgaat aaaatcgtgt cacgaaggct cgggcacaag tgctgaagcg 180  
 ccaatttcac aagttgcaga tggagaaaac tgaatcgggtg aacgactatg ccatgcgtct 240  
 gactactttg gtgggagaga tccacgcgct tgggtgcaag ctcgacgaga ccgagattgt 300  
 ggagaagttt ttcagttcgg tgactgataa attcacgtac atcatcggca cgctcgagca 360  
 gctttacgac atcgacgaca tgaccat 387

<210> 7545  
 <211> 168  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-C10  
 <400> 7545

gggacggggc gagaacgcag nggactcgga cctgcagctg gagcggatta acgtctacta 60  
 caacgaagcc aaccggggac cgttcgtgcc ccgcgccgtg ctcaaggacc tccaaccccg 120  
 gaacatggac tccgtgcgct ccggggccct ccggcaaatt ttccgccc 168

<210> 7546  
 <211> 278  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-C12  
  
 <400> 7546

```

ggggctcagt ttatgaaata gaggtgaata atattttgag cggatatactt tcattgtcaa   60
cataacaaca aaaaaatggc aaaaccttca aggcaaaaaa cataaaaaggc gggtccaaac  120
caaatggta aatttaaggc ccccccttca acaacaacc atcaaccaat ggcttgccca  180
aaacaatgat tgcctcaaac taacaaaatt cccgggggga gttttgtttg caattatttt  240
gatttagttt gcataaagca tggaactggg catcccgg                               278
  
```

<210> 7547  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-C2  
  
 <400> 7547

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gggtccacgg cggaagaatt agcaatgcta aattgggtgag aagagagcga gaggaagatg   60
atgaggcgag atggaaaagg ttgattttat aactgggatgc taggcttaaa tcagaggaca  120
tggtancgga agaacaagat gtcattttct gaataatact gaaggtactt tcagtaaagt  180
ttctgcaaata aagtgcattc agaacgccag gatgtgtggg gacaaaatgt actctattgc  240
ttcacatggg aatggcttca gttccgctac tgtcacgagc ctgaggttct gatcctacac  300
ctcggtgct cgccagaag ctaagtcata ccaatttatg ttagttcttg agattttttt  360
gtggctttgg atttacagtc tgcaaatgt gtttatgctt ttaacaatcc ttccagctct  420
aacatacata tgttttttt                               439
  
```

<210> 7548  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-C4

<400> 7548

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ttgggtgggat ggggtgatct tattgtgaaa atgttctgat cctatgggtgg aagggtgaaa 120  
gggtgtgtat tatattagtc tttgcttttt agtttaccac aatcatcctt tctgtacaca 180  
ccttttggga gaagcctatt tgattagaat ttgctacaat actctatatg cttcacttat 240  
atcttttgag cttgatagtt ttttctctag tgcttcactt atatttttta gagcacgggtg 300  
gtgtcttaat tttgaagaaa ttgctagtct ctcatgctta acttatatta ttttgggagt 360  
cttttagaac agcatgggat ttgctatggg cataaagttt ggtccaaaat gatgagcatc 420  
caagtgggta taataaaaac tadc 444

<210> 7549

<211> 277

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-C8

<400> 7549

tcataatacg aatctgtact ctcttgcaaa ttttaatttaa cggctgacgac gattacatgt 60  
ctggatagaa catctgacga ctcatctcag gttgaactgc cgaggagagc aattgtttct 120  
tggcctgact gtttagatac aacttacgac gttgctgtct cgcattgtccc tattgtgtct 180  
tcattcccg gcaattgtcgt tttcaattag ctgtgatcat cgtttgctct ccttgtctcc 240  
tcacgcctct gtgcagcct gctctcctga tctgttt 277

<210> 7550

<211> 392

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-C9

<400> 7550

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tagattttta ggtccctttg ttttaagtga attgggtcaa tctgtcatga ggcgggggtac 120

aggtagaccc acagtacgga atgacaacag tggatctgaa aaatcttggg tacactgacg 180  
aaccgttcat cctacgcaat gatgtggcac aagttatcta tgtgaaggac atgtctacca 240  
gactgaggaa aagaaaaaat aaggaagcga atacatcata cgatgagcca aagtgccaca 300  
tagttctttc aagaaaaagg gacatcctgn gagtggaggg caagacagac atgtctgaag 360  
agtatggaat ctttcatgaa attcctccct tc 392

<210> 7551  
<211> 370  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-026-Q1-E1-D10

<400> 7551  
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gagtgatctt catctgctcg ccataagga aggagagccc ctgcgcaagt acattcagag 120  
attcagcagt gtgcagcaca acatcccaaa cgtccaccct gccgcggtga ttagcgcgtt 180  
ccatcaaaac gtgcgaaacc gcaggatgcg ggacgaaatg gcgatgtgca agattaagga 240  
cgtcagtgag ttatatgcac tggccgacaa gtgtgcacgt gctgaggaag gaaggagacc 300  
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aaaaccggcg 370

<210> 7552  
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<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-D11

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gaaagccgtg tttctgcctg ccgtgtttgt ttcacgtgt ttgtgtctgt ctgtcgtcgt 120  
cgtcttcgtg attttgaact ttctctagac tgaattttgt acccgattta aatt 174

<210> 7553

<211> 299  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-D12

<400> .7553

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gcgcccctgc tgtgcgccgg catcacctg tacaccccca tgaagtacca cgggctgaac 180  
gctcccggga tgcacctcgg cgtgctgggc ctgggcgggc tcggtcacgt cgccgtcaag 240  
ttcggcaagg ccttcgggat gaacgtgacg gtgatcagct catcgccggg gaagaagca 299

<210> 7554  
<211> 370  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-026-Q1-E1-D3

<400> 7554

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ttgcttcag ccccatcacg accacctcct cctacttcta cggcaaggcc attgccaggg 120  
cggcgaggct ggcgctgac gccgaggagg tcgggtgccc cgacgtcatc cccgcgggtgc 180  
atcggttctt gaaggccacc gtcacgccgt ggctggacgg cagcttcag gggaaatgggt 240  
tcctgtatga tcccaaattg ggcggccttg tcaccaagca ngggctgcan gactccggcg 300  
cagactttgg cttcgggatc tacaacgatc accactacca tttgggctac ttctggtat 360  
ccattgctgt 370

<210> 7555  
<211> 358  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-026-Q1-E1-D4

<400> 7555

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atccttcgat aaacatggct gcaaaaaggc attatcagtt attgtagacc ccgttcgcc 120  
tccggttcaa aaaaggcgtc cctacggtac tgatatagtg aaaagtcccc atttttatcc 180  
tcagcctatg caaaggcagc catttatcat agtgaatggg ctcccagtg aatcaccgcc 240  
aatcgaaggg cagtgcgtg cccaactgga aatggacaag tcatgtcaag gcagcanggc 300  
tgcaataaat actctcccct ccgagtcac tgggtctcaga ggttctttat cctctgaa 358

<210> 7556  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-D6

<400> 7556

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agacgctcgt cgccggcgag gtcacccgc tcagactggg atcccaactg agatatacag 180  
ctccatcact ccagttcgac taatcttttt tagtcgatcg atcatctgat ctaataccat 240  
atatagatcg gaaaatataa tgtgtgtgtg aagacgcac atagtgcgtgc gtgggtgtcgg 300  
tgtatgtact ataactgatg aagcaataac cgctctgtga tcgatcgagt tggctcatct 360  
tagtgccata cgtagcacgg tgagacgtcg cctgtgacct ccggtgatta gtgtcgtcct 420  
ccaacgtgta cccagtcca tt 442

<210> 7557  
<211> 79  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-D7

<400> 7557

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ctaaatctga gacgctttt 79

<210> 7558

<211> 353  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-E10

<400> 7558

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 tgtcaccgcg gtcggagaag aacctggtgg aggttctcct cggcctccac ggaaatgaag 120  
 actttggctt ccccatcacc cgctccacgg tcaaagcatt tatcttgaac atatatgcgg 180  
 gtgggacaga cacatctcca tggatatgggt cacggcagag ctgatgatga antcaaaggt 240  
 aatcaggaag ctgcaagaaa agatcagggc cggcggtccg cgagatcaat ctccggacga 300  
 gcggaagtgt catcaagtac cttggcttgg tgatcaagga gacgttcaag ctg 353

<210> 7559  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-E11

<400> 7559

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 aagtgttata agaaatgaga tatcatgtgt gaagatttat ggctttcaag ccaaattggtc 120  
 aatcttatgg ccagattcat ggcatagttt gttcaaata tctcatatta tgcacaaggg 180  
 tgcattcttg aaaggcaaac aatgttgtct aaggaggttt tcattttctt tggacaaaaa 240  
 attcattttt tatttttcga atgccccaaa tgagtttttt tttgtgaagg acctaccata 300  
 tatttgtaac aaaattgggc caaataaatt ttccaaaata ctatgccata tttgattcac 360  
 aattgacaaa atagttgggt atcaaaagtt ttgatccacc tctgatgaaa aagacaaaat 420  
 tccgccgatt c 431

<210> 7560  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations



<223> Clone ID: LIB104-026-Q1-E1-E3

<400> 7560

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gacgtcgcca aggtcttctg aatcagttca tttcacctca gccgtccgat ccaggagccg 180  
atccatctac gtacggcttc gtatatcaat ttcattgcaac tacctactcc ggtcccgatc 240  
cagcctcagc ttcacctgaa gccggcccta attttgtttg atcaattttt tgctactagt 300  
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<210> 7561

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-E5

<400> 7561

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ttgctgacta caacatccag gagtccaccc tccacctcgt gctaaggctc cgtggtggta 180  
tgcagatttt tgtcaagaca ctgacaggca agaccatcac cttggaggtc gagtctcgg 240  
acaccattga caatgtcaag gctaagatct aggacaagga gggcatcccc ccggaccagc 300  
agcgtctgat cttcgcgggc aagcagcttg aggatggccg cactcttgct gattacaaca 360  
tccagaagga gttccacctc caccttgctc tccgcctctg ttgtggcatg cagatctttg 420  
tcaagaccct caccggcaag actatcac 448

<210> 7562

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-E6

<400> 7562

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tgccgggtcc ggcactagcc ctggcactgc tcggtgcttt cggcctcgcc atcgccccgg 120  
 ctgttcagtc ggccccacc atcgaggcca tccaagctac atgcgccaag acaatacagc 180  
 cagactcttg caaacacgtc ctgctcgcca acatggccgc cggctcaccg gaggtgaaca 240  
 gtgtcaccct aatgtccctg caagtcgcg caaagctcgc caagatggcc aacggcttcg 300  
 ccaatgccat gtcaccacg gaccgcacc ccgccaaatg cctcgcatat tgcacgaag 360  
 accttcatag ggtggccaac gcatttgacg ggattccagt ggaggcggtt aaacctggcg 420  
 acgaggccgg ggtgctgtcc ttcagctc 448

<210> 7563  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-E7

<400> 7563

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 gcaagtctct tcttgctagt gttgtacgcg ttttattcct tcgcccgaca tgctttcgtg 180  
 ataaaagaat catagcaaca tagcgtgagg ttccataggt tgatgagcct gatcagtcgt 240  
 gtaagctatt tactacagcc gtcttagatg gccccaggta tcctcttcgg cttgatcttt 300  
 cctttgcttc gatcgccaac ttgcattcc ttattccact attgcgatat ctttgcctg 360  
 gacaaagacc aagagctggg gcagggtgaaa gaatagctta tggggctgga gtcaaaggag 420  
 ctttcataga catagaaatc ataatanaaa gagc 454

<210> 7564  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-E9

<400> 7564

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tcaaggagtt gactacgatg agaccttctc acccgtagcg atgcttaagt ctgtccgaat 120  
catgttagct attgccgcat tttatgatta tgaaatttgg ccaatggacg taaagactgc 180  
attcctgaat ggattttctgg aagaagagtt gtgtatgatg caacctgaag gtttcatcga 240  
ttcaaagggg gctaaccaag tgtgcaagct ccagcgatcc atttatggac tgggtgcaagc 300  
ctctccgagt ttggaataaa cttttttata gtgtgatcan agcatatggg tttatacgga 360  
cttttgagga agcctgtatt tacaagaaag tgagtgggag ctctgtagca tttctaagct 420  
tatatgtgga taacatattg ttgaatggaa atgata 456

<210> 7565  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-026-Q1-E1-F10  
<400> 7565

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gttgtgtaaa cgtcttattg catctggcgc gcctttgaat gccttctctt gagtggaggt 120  
tcggggcgcg cgatgggttaa ctctaccaa cctccccctt aggagcatgc atagtagtac 180  
ttttcttcga gggctaataa aactcttgca ataagtatat gagttcttta tgactaatgt 240  
tgagtccatg gattatacac gctttttacc tttccatcat tgctagcctc ttcggtaccg 300  
tgcattgccc tttctcacct tgagagttgg tgcanacttc ggcggtgcat caaaaccccg 360  
tgatacgata acctccatca cacataaacc tccgtatacc ttcttaaaaa cagccaccat 420  
acat 424

<210> 7566  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-F12  
<400> 7566

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gtgaacaggg ttcccgaat acctaacggg tattcggtac accgtgcaat gtacctaccg 180  
catcacagcc caccctacg gtcagcgctg tccacggcct ccagtagct acaaacacca 240  
gaaactactt gcaactcctg aacagagagc tacgggtgaat aagaagtcga gcgggggtcat 300  
atttcagggc ccaatgcatg gtagtagctg tatcttaaat cacatataca gatctcagtg 360  
cttaaggctg gcttcaatga aacaaccac catgtaatcc tacatggcct ctcatcgata 420  
cctt 424

<210> 7567  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-F3  
<400> 7567

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ggacgtcgcc aaggctcttct gaatcagttc atttcacctc agccgtccga tccaggagcc 180  
gatccatcta cgtacggctt cgtatatcaa tttcatgcaa ctacctactc cgggtcccgat 240  
ccagcctcag cttcacctga ggccggccct aattttgttt gatcaatttt tttgctacta 300  
gtagtaacta gtgatgatca ctgttgacc atttatztat tttatatcgt cacaactttc 360  
cagtgggtcc tttccttcct caacctttt 389

<210> 7568  
<211> 420  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-026-Q1-E1-F5  
<400> 7568

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acgcggccga tctaaaggat gaaccctaaa ttactcgtgc atgaaacttc aaaccctcc 180  
tatagggtac ccaattatta aattaaccga ccttcattta aaaacatcga gtcgggaaaa 240

cccttgacat taccacttt atcccccttg aaaaaaatca ccttttggca atatgaagtc 300  
 gtactaaatg ggcccgacg gttcacctta ccgaaaaatt cccctactaa atcggttaatt 360  
 gggatctccc tgctaaaggt caatttcgca cgaagggtgt agcggtttacg ccaacattga 420

<210> 7569  
 <211> 458  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-F8  
 <400> 7569

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 atttgagata tctcatatat tggcaaagct aatgcctgag agggagctac ccaaacaagc 180  
 atgctttata tttgggggtgt gtaggctgga aggatcattg gtaattgatc ctatcaaagg 240  
 aaggcgcgat ctccagcctg aaggaatggc tgattgattt agctatagga agcaatcctg 300  
 ttctgcgatt gattgctgga atcatattta tccaagagca agactacaca cgatgctgtc 360  
 aagcacacac acacaacgga ggaactctgg acatttcctc atcttctgac attggaagag 420  
 gatgcactaa gttataaagt aataaagtaa gacatgga 458

<210> 7570  
 <211> 250  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-F9  
 <400> 7570

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 attcgtgttt ccttgtctga gtacgtttct gattccagca atcttttgca gtccatagaa 180  
 taagttggtt tccaaaatca aatacgaatc cggaaacccc cctccgttta agcccaaaat 240  
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<210> 7571  
 <211> 351  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-026-Q1-E1-G1  
  
 <400> 7571

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 agaacaagag gctcaccacg gtggtgccgg cgacgagatc agcgcgggcg atcgacggcg 180  
 gttgtcgtgg ttttgtcacg gcagatgtcc tagagaaagg acttagtcgt ggagccatcg 240  
 ctacgggtta gcttaaaggg gttaaagcgg acaagggacg caagagagtt atatactagt 300  
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<210> 7572  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-026-Q1-E1-G10  
  
 <400> 7572

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 ttgatccaca ccgcattctt gttccacttc caccttatat ccactatttt tttcttcac 300  
 cttttcttgt tgggtgtacg tcctctacaa gggaaatgaa cacttccctt ctttgttgcc 360  
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<210> 7573  
 <211> 474  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-G11

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acaatgtgaa caatgtggca tgtaccctga accctaacc cccccacac acacacaaaa 180  
ccgtaaaaac attcaaaatt ttgccccaca tggaaaccat tatgcatgca ttctctatgg 240  
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cgcatttccg gcctagcatg tcaacacccc gaaagcccc ttgaggtata gaccgatgtt 360  
ttgaccagtc agtccagaaa actagctttg tttgtgcaag agatcatgtg tgccaaaact 420  
gaagtgattt ggangtgtcc ananaatcat cgcattccgg aggggccatt tggt 474

<210> 7574

<211> 304

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-G2

<400> 7574

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tgatcaacat gtcactgaac agaaacttgc tgagggtttt tcaaactgtg gtcaagtgg 180  
agattgccgt atctgtggtg atccaaactc agtgatgcgt tttgctttta tgcagttcgc 240  
tgatgatgtc ggtgcaagag cagctttaac gcttggtgga accattcttg gtttttatcc 300  
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<210> 7575

<211> 388

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-G3

<400> 7575

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cgaggagaa ggactacgat ggcgcggagc agccggagcg gcggcgggtc tcttccgccc 120  
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 aggaggcgga gtgccgccac ggcgcggaga aggaggctga gtgccctgat cactcgccgg 240  
 aggaggaggc ggagtaccgc cacgcgccgg agaaggaggc tgagtgcctt gatcactcgc 300  
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<210> 7576  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 ctcttcgtgt cactgatgac ctgttgatga ggagggcata ttttaggaag cagcagcttg 180  
 acaacaaaac aacatcacct aactctaact gaagaggaca gccggtgtga tttgctctta 240  
 cattgatatc gcatgcgtat gaataatggt ccaatggaat tgggagcgga gtaagaagct 300  
 catgttgctt ttatgcatgt aataatcatg cctgcctgca tggcccgcga gctgttggtc 360  
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<210> 7577  
 <211> 136  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-G5  
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<210> 7578  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-G6

<400> 7578

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acttcactcg cctcgcgccg cacatcctgg gagcctgcaa cgcatacctc ggcgggcgatc 180
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ccgggatcgc ccgtggccag tgacttcaga gcgggcacac ctctgcatg gcgatggcgg 360
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<210> 7579  
 <211> 471  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-G7

<400> 7579

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gacgggacgg gcctcgttcc cgtcctcgat aaagctaag gacacctaac tagcgcattt 180
aatgcatttt gtcccctaac gtcaggcgat aagctcacgc gctgtacacc tttccacctc 240
ctgtgtgcca ccgtggcaac cccttttcga ctataaacg aggcccgacg catactggag 300
agggattcgg ctttttgaa ctacacaacc gccgtagcta gttcgaaagc tcaagaacac 360
tcaatacatc caccatagca ggactatggt tttacgcac ctgcgggcc gaacctgtgt 420
aaacgatatt tgtgctggct cctggacctg ctcttctcac aaccccgcg c 471

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<210> 7580

<211> 463  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 7580

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tgtcttatag tttagctgct ttatctgtct ttgggtttat cgcttggtgt tttgtatggg 180
tcaataatac agcttatccg agtgagtttt atggaccac cgggccagaa gcttctcaag 240
ctcaagcatt tacttttcta gttagagacc agcgtcttg agctaattgt ggatccgctc 300
aaggaccac aggttttaggt aaatatctaa tgcgttcccc aactgnngaa gttatctttg 360
gaggggaaac tatgcgtttt tgggaccttc gtgctccatg gttagaacct ctaagggggc 420
ccaacgggtt ggacttgagt aggttgaaaa aagacatata acc 463
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<210> 7581  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-G9

<400> 7581

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acaatttggt gaccagtcac cagatatccc aatactacta caagcattgg acgaacatta 120
tgcggtgac cctgcggggt caaaaattat gtagtgcaca accgagacac ctctccagtc 180
aataaccaat agcgacacct gggttcccat attggttcct acataatcca agatcatctt 240
tatccgtcga tgctttatga catcatacat aagtcgcttt gtcagtcctg acgttacgtg 300
cacaagattc gatcatcggt atcactatgc ctactttaaa ctcattattg gcaagtcgct 360
ttactcgatt catagtacat catcctg 387
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<210> 7582  
 <211> 376  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-H10

<400> 7582

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acaacatctg cagcttcac tcggaaacca accccgggca cttgcggtcg tgggagacca 120  
aggacagcca gctgacgatg gtggcgacg acctgaagcc gggggcggtg ctgacgtgcc 180  
cggagaagaa gttgatccag caggtggtgt tcgccagcta cgggaaccg ctggggatct 240  
gcggaacta cacggtgggc aaatgccaca cgcccaaggc caaggagatt gtggagaagg 300  
cgtgcgtggg gaagaggagc tgcgtgctgg ccgtgtcgca cgaagtgtac ggcggggacc 360  
tcaactgccc gggcac 376

<210> 7583

<211> 330

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-026-Q1-E1-H2

<400> 7583

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ccccttctaa tccaattcag caatttgcag gtacttatga aacaaaaaaaa ataactgtcc 120  
gtgatcttgc tagatgaggt ggccgagtgg aaggctgccg ggctgggtgt angaggtctc 180  
caacgattcg tgagaagtta gcctaagatt ctagttaagt gtgggtgttg ggttgtacct 240  
gtgctacacg tttgttccca ttcgtggcgc acgtcttgta aatatttttt cccttctata 300  
aaaatatggt acgtctttgt cgtattcttg 330

<210> 7584

<211> 226

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-H4

<400> 7584

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ccaagggcaa ctaccggctg gtcctgaacg cgagcctgta cgatgacatg tcgctgaagg 120  
 acatggagaa gaagggcgctg acgttcgcct gcatcaacag caccggcgat acccaggcaa 180  
 tgctcatcac gtacgccctc acgttcaagg aactgtcgt cacgga 226

<210> 7585  
 <211> 454  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-026-Q1-E1-H5  
 <400> 7585

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 tcgtgaaggacccgaccaaactgtgtgtgtcatcatgacagacatgctggtataatgaagg 180  
 tcgtgaagacacttcgtaatccaacagatgatgaaccaacaccttggaggacttgcaga 240  
 gccgggtgggtgcatgcgccatcttggggctaattttttctcacagttcaagaacaagcgggt 300  
 tgatgaacttgttcaaaaaattatgcaagcagagccagcagtgaataatgaatttat 360  
 ggtcaaaactagatgagtttactaagaagcagggtccgcgcagggaagaaaatggaagaag 420  
 atcagggttaaattagcagcatcatcgcggtagct 454

<210> 7586  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 <400> 7586

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 gcttgaatacaataccaagatctgaaatctttaatgagagagtagtttgcatagttgc 180  
 ataattatttagctactcatgtatcttcactatattcttcggagtagttttgtgtgtt 240  
 gctctagtgttcacttatactcttagagcatgggtggtgttttttttgaagaaatat 300  
 atgatctatcgtgttctactagattatttggagagtcataatagcatgtaatttgct 360

taatgttttaa atacttggtta ttcangatat g

391

<210> 7587

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-H8

<400> 7587

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aagactacgc aagtatgcga gcgcccggag atgctttttg cagtttttgc aacatgagtc 120

atattgtaga aaattagatg cggcggagat gttgcattaa cttttgcaac aagagtcttg 180

atgcagaaaa ttagacgcaa cggaatgt tgttgtaatt tttgcaataa ggatcttggt 240

acagaaaatt agatgtgtga aagatgtgca agaaattaga cgcgtaaaag atgttggtgt 300

tgcagaaaat tagacacagt gggagatggt gtttgcaatt tttccaaggg tcctgttgca 360

gaaaactaaa gaagaagaag ttttgcaaca tgggtcctgt t 401

<210> 7588

<211> 225

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-026-Q1-E1-H9

<400> 7588

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gtgggtttca gggacttttt gaatgggaat ttgatggcac tatgctgcgc tgtgatttgg 120

aagttctcaa cagcacagt acatgtgaaa ttctcttacg tgcaagtcac ctgctctaata 180

ctcgccattt ttgaaattac ctgaaaagca gcaactctac aggat 225

<210> 7589

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A1

<400> 7589

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 catcacagtg cccccgagt cgagctctat tctgaacatg ctccagaaca cgctgggtag 180  
 gattccctcg acctcctaaa acaagccaga caaagggaca aggtccgatg gggcatcaat 240  
 gcacatttct tgcattcata tcttgccaaa attctgataa gtcaacgcct tcaatccggg 300  
 atacatgctc gtctgattgg attaataaat cctcaatatt tcctcactta gggaagatcg 360  
 tctcatcacc tccctcatag tcttgccac attta 395

<210> 7590  
 <211> 311  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-A10  
 <400> 7590

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 cgcacacctt tcgcgcggtg tcatacagcg agcagatgcc ttctcagaa cagccagcag 180  
 acgtacatat catggtattg tccagagacg attccatgat agattgccat gcagctttcc 240  
 accgttgctg ctaggaggca tgcttcatca ttgtcataat gcgttgcatg atcatgtgct 300  
 tgacattgtt t 311

<210> 7591  
 <211> 289  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-A11  
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 gattacatac ctttccatgg taactttatag cccttatata ttttcatcaa aattacctat 180  
 catcgtattc tatcatggta tttctatatg gttccgacat atattgccat gcacttttcc 240

actgttccgt ttattatgat acgcttcacg attgttatct tgctttgcc

289

<210> 7592

<211> 234

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A2

<400> 7592

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cctggcgggtg tcgcgctcgg gtacggcccg aattcggttc gcgttttttt agtccgtgca 120

gaacagaaag agggagaaat actaaacgga ctccaaaaat cctgaaataa atttccctg 180

gcttctaaaa tcaggccgca caaggtgaac atttatttga ggctaaatg caat 234

<210> 7593

<211> 117

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A3

<400> 7593

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ctgtgatacc attcaagata attcctggta cgcttttatt aataaatcct caatata 117

<210> 7594

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-A5

<400> 7594

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ccccattctt tctggtctac ggagccgaac agctttgccg agtgacctgc ttcacaacgc 120

accccgagtc gagctctact ctgaagatga agcagaacaa gcccggcagg acgcaatcga 180

cctcctagaa gaagaaagag aaatggccat ggtccgatcg accatctatc agcaagcctt 240

gcacgatc catgccagaa atgtgaagag tcgagccttc caagaaggag acttggtcct 300

ccgagtggat taacaaaaac cacacaaact ctacactact tgggaaggtc cttcatagt 360  
 cactagagtc ctctccacc ttataacgt cgatcgccaa gattgatgag caacgaatcc 420  
 tgaaatgcgg aactactttg ccccttttat ag 452

<210> 7595  
 <211> 231  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-A6  
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 ccattcttt ctggtctacg gagccgaaca gctttgccga gtgacctgct tcacggggca 120  
 ccccgagtcg agctctaate tgaagatgaa tcataacatt cccggcagga cgcaatcgac 180  
 ctctataag aagaatgaga aatgggtcatg gtccgatcga caatctagca g 231

<210> 7596  
 <211> 456  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-B1  
 <400> 7596

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 atcttggggt gccatgggca tccccagct taggtcttg ccacccttta ttccataatc 180  
 caaaaaaggt ttaacaaaaa ctttaaaact tcacaacaca aaactcaaca agtaatctta 240  
 taagctccgt taatgaaaga aaacaagacc accacataag gtactgcaat gaactcattc 300  
 tttatttatt ttttttgtg ttaaacctac tgtattccaa cttccttaag gtttataaac 360  
 taatttatta gccatagatg cattgaaata cgcaacaac acacgaataa cagaatctgt 420  
 caaaaacaga acaatctgta gcaatctgta actaac 456

<210> 7597  
 <211> 412



<212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-027-Q1-E1-B10  
  
 <400> 7597  
  
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 agctaagcag cctgcaggag aggatcaggg agaggatgaa cgtgagggaa ggcacctcct 180  
 acatgaggag cgccgtgcgg cgcttcttcg aggccggcat gtccggccaag aggatgggccc 240  
 tcgccgacga cgagcagatc gtcaagatga ggccctccct taccaccaga atgacctcct 300  
 cccctgcaga tcaagatgat agtccgtaga gagcaacgat gcatacatat ataggatgaa 360  
 gattgatgtt ggaattacca caattcttag tactacacat acatacatag aa 412

<210> 7598  
 <211> 423  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-027-Q1-E1-B11  
  
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 ctgcgactac atgatgtttg agaaacggat ggccgagaca aagtctttca aagcgctagc 120  
 accttacgat cgggtagaca gtaccaacct acatccccta catatgctag tctaccactg 180  
 taagagttcg cagcacttag tcaactatgc tagagcctgt agtagcttgt ggctgcatat 240  
 ggaagtttct agtatgaata atctcacgat ccctttgagc ctgggtggcg gtccataaag 300  
 aaaaacaggc aatcactgga ataccagggt gcctcaatcc acccagatgt gtgtttaagt 360  
 tgccacctta aataaaccat taaattaaca atctcacaat ctatcaatgg tacactcacc 420  
 caa 423

<210> 7599  
 <211> 380  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> unsure at all n locations

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ggtaagcgcc tccatgtcgt angggtgggt aggccaatag aagactacgg aacttagcct 180  
agccactcag ttctgccccg agccaagtct atttagtgtc agcgaacaca taccactatc 240  
tatatatagg tttttctttt tcgtagaggt tgcgcttaa gtccttggac ccttccttca 300  
tgaagcttga ggaaacactc acttttcaat caacngcatt cttggttctg cacttaatcc 360  
tgaacctgtg ttgggttggg 380

<210> 7600

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-B3

<400> 7600

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gtcttggagc gtcttttgca tttagttttc acttttcttt tatgcaccat gccggtatga 180  
gatagtcttt ggttgattta tagaatgctc attgcacctc acttaaatta tttgagttag 240  
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ccttcacata gaaaacggcc atttgtagaa tgcccttttt cttaacttat atttgttaga 360  
gcgtgggcat atcttttgta gaaataatta aactctcttg cttaacttat atccaattag 420  
agagatgac 429

<210> 7601

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-B4

<400> 7601

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 acttgtggga ttcacaattc ctggtttcgc ctacattggc cttggagaca catcgccagg 180  
 atacgcgggtt aacttctata acatcatacc gattgccgcc ttcacccctcg cggtcctttt 240  
 caggaaggag ccaactggaca tgacgagcct ggtggggaac atcaggttca ttggaaccct 300  
 agtctgtgtt ggaggaacgc tggatgatcac ccgttacaag ggcaacgtgc tgcacctttg 360  
 gccacaaaat atcatcggtc accacccgaa gcaagccga actgcctttg ggtaacacc 419

<210> 7602  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-B5  
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 acccccgagt cctcggtggg tgaggtcaag agaatcatcg agagtgtctca tgggcagaat 180  
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 aaggcgtcat catctagtgg tgcttctact gcttcaaagg cacctgctaa tcagtctcaa 360  
 cctgtactc cacctgcccc tgttgectca gctgcaagat aacaacttca caggaacctg 420  
 ttgctgcac tgaaccg 437

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 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-C1  
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taaaaagtgt cacaatggta aggggaataa taatgggaaa aggggtaatt caagaatttc 180  
ctttacttgg tgccgggtgc ttttaaccact atgggtggat ctattctcca taaaactagt 240  
agtcttgcag atgctatata tttgctcata gttgaacttg aaagacaatt tattcacatg 300  
catccttcca tacaaggaat ttttctagag ttttctaata ttgagcattc ttctgttaag 360  
cgcgagcta ccatctttct agcacatgag ttcatattta taataaaaga ggctagttaa 420  
atctttgcac at 432

<210> 7604  
<211> 414  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-027-Q1-E1-C10

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ctccatgata ttcaccgata atcacaagcc taagcttggg gatgccccca gaatgcatcc 180  
cctctttcgt cttcgttcat tggttaacttt acttggagct ataattttat tctccacatg 240  
atatctgttt tgcttggagc gtcttgtatt atactactca ttgctttgta ctttaccata 300  
atcatccttt gtcgtacaca tccttatggg atacagccta ctttgattat aatctgctgg 360  
aatactctat gtgcttcaat tatacttttc gaacttgata gcttttggtc caat 414

<210> 7605  
<211> 268  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-027-Q1-E1-C11

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atgcacgttt gtgaccggac ggaatggctg cactgttttt ccaactatta tggcaactct 180  
ttggtgtcgt tcacagcgt catgtttgat aaaaaataac ttggtagtgt tgcacttcct 240

gaattaaatt aatccgccta gctaaata

268

<210> 7606

<211> 439

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-C4

<400> 7606

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ccccgttttg accgcaatgc tccaacacat gtctgtttcc tccgttttgc ggtacgccac 180  
accctcctg atcaacaaga ccctgtttcg accgtangag gtccaacaca agtccgtttc 240  
ctcccttttg tggtagcca gaccctccc gatgaacagg atcctatattt gaccgtgccg 300  
gtcgaacaca aggtcgtttc caccgttctg cggtagcca ggctcgttt ccatcggtg 360  
ttccgtccaa gccggttggc tcccaatgaa catgacatat tctgaccag tcctttgcct 420  
cccgatgaac aggaccttg 439

<210> 7607

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-C8

<400> 7607

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cggaaacggg agcgcggcag gtagtgggct ggacagcgtg caggttggga agcacgaggt 180  
gcgaattcgc gtggaagtga gctagctaat tatacagaca catatataga cagtattggc 240  
gcagaaggca gatgaaagga gtcaaatcaa gatgaacaaa tctctgagat cagatgtata 300  
tacatatgta tgtaagtatg tcttatgcag actcttactt ttctgagata agaacaactc 360  
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gccttaaa 428

<210> 7608  
 <211> 341  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-C9  
  
 <400> 7608

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gggcggccgg ggaggcggcg tatcatgatc aagaaccttg agaaggcgga gaaattcaac   60
gcgtcgtggc ggacagacgc gcaggggctg tgcaagaagc tcaactcaca tgtcaagggc  120
ggcgtcgggc catttgggct ctgggtgctc gcctccgacg acctcaagga aagaacagct  180
gttttcttca gggatttcaa gaacaatgac accagctatg tcgtcctcat gtgcaacgac  240
cctacaaggt cgtcattcga gtcgcagatc tacangccga ccttcgccgg cttcgtcaac  300
atcgacatta acaagaccaa gaagatcgcc ctcangacat t                               341
  
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<210> 7609  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-027-Q1-E1-D1  
  
 <400> 7609

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gacggcttca tcgacttcag cgagttcatc tccttctgca acgccaaccc cgggctcatg  120
aaggacgtcg ccaaggtctt ctgaatcagt tcatttcacc tcagccgtcc gatccaggag  180
ccgatccatc tacgtacggc ttcgtatatc aatttcatgc aactacctac tccggtcccg  240
atccagcctc agcttcacct gaggccggcc ctaattttgt ttgatcattt tttttgctac  300
cagtagtaac tagtgatgat cactgttcca tcattttattt attttatatc atcacaagtt  360
tcttttcttt cacaaaaaaaa aaaaaaaaaa aacaaagaaa agcgacgcac agggagccag  420
ggccagc                                           427
  
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<210> 7610  
 <211> 431  
 <212> DNA



tcacccttcc atcattgcta gcctcttcgg tacogtgcac tgcctttct cacctcaaga 180  
 gttggtgcaa acttcgccgg tgcacccaaa cccogtgata tgatagcta tgtcacacat 240  
 aagcctcatt atatcttctt caaaacagcc accataccta cctatcatgg catttccata 300  
 gccattccga gatataattgc catgcaactt ccatcatcat catatacatg acttgagcat 360  
 ttattgtcat attgctttgc atgategtaa gatagctagc atgatgtttt catgacttgt 420  
 ccgttttttt gagtccatgc tacgctagat cattgcaca 459

<210> 7613  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-D9  
 <400> 7613

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 gtgaaaatgt gatcggcatt ggtggctctg gcgcgattgt gtttcagggg gttctccctt 120  
 ctgggtcaag ggttgctgtc aaacgggttc aagctatgtg gccgtgctca aaggcggttc 180  
 tgagttagct tcgtgccatg cttgattgcc cacaccaccc caatcttgcg cactcttgg 240  
 gatggtgctc cagttagcat gaccagggtc ttgtttacga gttcatgccc aatggtaatc 300  
 ttgacagtgc actgcacaca aagggtggag caatacttcc ttgggaggca cngtttcngg 360  
 cgggtgcttg tgttgcatca acacttaa atttgcacga tgaatgtgaa caccgca 417

<210> 7614  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-E1  
 <400> 7614

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 acgtgatcgt gctggctgtg tacgtcaagg tgtcgggctc ctgcaaagag acgtggacgg 120  
 ggttctccac ggaagcggtc cgcgacgtgc tcagcttctt ccggctcgcc gtcccgtcgg 180



ccctcatggg ctgcctggag atgtgggctg tcgagctcat agtgctcctg tcaggccttc 240  
 ttcccaatcc aaagctggag acttcgggtgc tgtccatcag cctcaacacc gctgccttcg 300  
 tatggatgat cccctttggc ctcggtctg ccataagcac ccgtgtctca aacgagctcg 360  
 gagcggggcg ccccgacgct gcccggt 388

<210> 7615  
 <211> 358  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-E10  
 <400> 7615

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 gagaggttac tgaccacgct ggagcacgat caacctgacc acgaggggtct gtttcctgcg 120  
 agcaaacgaa gaacactcaa gaaactaaga ttgactctg gacattgcaa ctataatatg 180  
 aaagctttag tgatcacggt ggggttctgt cacatccttg tccggtcatt gaacacacac 240  
 gaagtagcca aagttgcagc tatggcgaac gtttaatcta aacaaaaccc taactcgaaa 300  
 ccacgcccta agggctctac atgtcgagga acatggggga atttcgtggc cctttggt 358

<210> 7616  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-E3  
 <400> 7616

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 tacgcactct acaaattctat cgtcagttgc tattgtctgt aagtgatttc tttctgtagt 120  
 ttaagtcgca agctaactgt agtgatcatt ttgatcaatc attacctgta attagcctca 180  
 ctatattctt ttctgtggta ttatgcagga tgaagatgta tgaaatgaaa aaatctggac 240  
 gctatggcat tgggtccatt gagccaaata gcaataatga gtagacatgg aatattccaa 300  
 gttgtcgagc aagtttagag gaaagcatgc tagagttctt caagcgcctc aataccaatg 360  
 gagatatact acttccttac aacttcctgt gagtcacact gtcttgta 408

<210> 7617  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-E4

<400> 7617

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ggatgtttcg tcgtggtatc atggcaaccc aactcctcgc tacgtggaca atcgtttacc 120
accttcttaa gtgtggaatt gttgtccacc tagtgaacct tcgtcatccg tttctttcca 180
cccctcttga tgcgtatctc gtgtctcaac ctgagagatg gttctatggt tcattccgtg 240
agttgttcga cctttgagaa gatcgatcct tccagaatth ttttccctct cgttgtcatg 300
ttagctaaaa ttctcaaaag caggacatca agacaaagat ggtgatcaaa tcaacgttcc 360
tatgaagtgc aagttggatc gtgaagattg cgctagtgtg gttccc 406
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<210> 7618  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-E5

<400> 7618

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accagtcgc tagttgaact acccatcaag ggtaggacgt acacgtggag taacatgcaa 120
gatgaccggt tgctggtgca attagattgg tttttttcct cagtgcactg gtcttcttcc 180
tagcctaata cactgtatc gcccttgggc aagcctgctt cagatcacgt cccctgcgtc 240
attggcattg atttgtgcat cccaaaaagc aaggtgtttc attttgaaaa ctactggata 300
caacattcag ggtttcacga gatagtgcaa tgctcttgaa gccaaccttg tcatgcggtc 360
aactcagcgg ctttgatctg tagaaagcta aagatactgc gttacgcttt aaagtccctgg 420
agc 423
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<210> 7619  
 <211> 418  
 <212> DNA

<213>      *Triticum aestivum*  
 <223>      Clone ID: LIB104-027-Q1-E1-E7  
 <400>      7619

attcgccgtc cgacgagtga aagaaacacc aatcgattga tattcacgta cacatatcgt    60  
 gaatatataa ctgttcaaga ctgtcatccg ggatgttctt gatatatcta cttttcattg    120  
 tgcttagtgg ggtttatgtc actgttggtt gttctcgctg ccgctatgct atgcatctgc    180  
 caagcaagca acatctcaaa cttgtgttgt tataacttgt tcagatggat cttatgtata    240  
 ttacgttggt tcattgtgca tctcacatac aatgtgtttc attttgaaaa ctactgaata    300  
 caacattcac ggtttcacga gatactgcaa tgctcttcca accaaccttg tcatgcagct    360  
 aactcaccgg ctttaatctg tcgaactcta aatattccgc tttatgcctg aatgtcct    418

<210>      7620  
 <211>      385  
 <212>      DNA  
 <213>      *Triticum aestivum*  
 <223>      Clone ID: LIB104-027-Q1-E1-F12  
 <400>      7620

ccgggtcgcc gggctatatt aaatgcgaaa tggctgagta tacttggaat atctgggtgta    60  
 tttagttggc caatgatttt gagtagtatt atcatcatgg tatgcttcac cctgctcctg    120  
 gaaaattgaa cattatctcc ttgtatgcta ttgataacct ggagtgtgga ctttcctgct    180  
 gtgggtcata tgatttgacg tgaatcggct tcagatgaac agcagagaaa acgggactca    240  
 gcattctcag tgcgtgttt gcttgctagc acatcttttc tgggtccac tctacgcat    300  
 tgatttgtct gaccagttgg catggtttgg aggatgtaaa tatactacag aagatgcgtc    360  
 atgtgacaag cctgccctag tgtgt    385

<210>      7621  
 <211>      453  
 <212>      DNA  
 <213>      *Triticum aestivum*  
 <223>      Clone ID: LIB104-027-Q1-E1-F3  
 <400>      7621

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 cgtttactca tgagctgagg caagtccagt ggccaacac gaagaatttc aagccagacg 120  
 taccagagaa gtacgacggc aagtcgcata catcggagtt cctcagcatt tacaccaccg 180  
 cggcgcaggc tgccgggggg cgggacgaca agatccttgc caactacttc ccgctgggtg 240  
 tcaagcccaa cgtcagggtc tgggtcatgc acttgccgga cgactccata tcctcctggg 300  
 cagacctatg ccattagttt gtcgggcgct ttacaggcgt ccacaaacct catggccaag 360  
 agagtgcact tcattctgct gccagaagg aaagagagcc cctgcgcaag tacaattcag 420  
 agatcagccg tgtacagcac aacatcccag atg 453

<210> 7622  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-F5  
 <400> 7622

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 agtatattgc aatgtccgct ggggagatc aagggtgtgtg gctaggaagg ttacacagtg 120  
 atctcatgga tcgagatcca acaagtggta cttaatgttg atagcaagtc ttaatttttt 180  
 tctacgtgaa gatccagcac gccatgatag aagcaagcac attaatacgg tgtatcacta 240  
 cataaaggac tgcattgaaa aagggaagt caactacatt tacaccaatg atcagatgat 300  
 agatatgcta accaagactt tggaccgaga gaagtttttg aagatacgaa gaaggatcga 360  
 cgtccgagtt gtaatatggt gacgtggtgt ttagggggat gattgttaga atttaacacg 420  
 tagtcacaat cctggctcgg acgtaaacag gacaccg 457

<210> 7623  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-027-Q1-E1-F7  
 <400> 7623

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tggatttcag gacaaccagt cgcagatgag catgaacgcc tccagattat aaagaatgat 120  
gacctcgaag agctccaaga actcggttct ggaacttttg gaactgtata tcatggtaaa 180  
tggaggggct ctgatgttgc aataaaaaga atcaatgaca gatgttttgc tgggaagcca 240  
tctgagcaag aaaaaaatgc ggaatgactt ctggaatgaa gcatctaacc ttgctgatct 300  
gcaccacccc aatgttgtgg ccttttacgg cgttgttcta gatgggcctg ggggatccat 360  
tgcaacgggt acagaatata tggtaaatgg ctcaattagg acggccttgc tgaagaattc 420  
aaggaccctg gatggacgca aacggctaatt tattgccat 459

<210> 7624

<211> 374

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-027-Q1-E1-G2

<400> 7624

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ggctgttgtg tggatgcaga accaacttgc acagaacaag acccaggatc tcatactaga 120  
ttacgttaac cagctgtgca accgtctgcc aagcccatg ggagaatcag ctgtggactg 180  
tgccagcctt ggattcatgc ctgacattga gttcaccatt aatggcaaga agtttgcgct 240  
gaaaccagaa gagtatatcc tgaaggttgg cgaaggagct gctgcccagt gcatcagtgg 300  
attcacagcc atggacatcc cgctcctcg cggctccttc tggatcctgn gagacgtttt 360  
catgggcccc taac 374

<210> 7625

<211> 458

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-G4

<400> 7625

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aaatattcaa caatagtctc gaggactaca cctagtgtgt gccttagcgt gccccactg 120  
gttcagatca gtactcagca gggatatgcc agcgtgagtc caaaaaagag agagaaagag 180

agtacattct aagacctcac actactagga aaaggcctac taatggcgca cgggttttgc 240  
ctactaatgg cgcactaccg gtgcgccatt agtagcacgc cactagtatt ttttactaat 300  
ggcgcaacac cggggcgcca ttagtatctg atatactaataat ggcgccaccac gaagtgcgct 360  
attagtatgt aagaacatgc gccattagta tgcctcccgg gggggccata cgtaaccatg 420  
tgctttgtca tactaatggc tcactctgtg gtgatgcg 458

<210> 7626  
<211> 479  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-G6

<400> 7626

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ttgccgaatc cctaaagggtg ttcggcggtg cactgcgaga cttctgttga aaatacacaa 120  
atagtttgaa agtgccatgg gctcgaaaag cgaaaaaact tattcaaaat gttaatgtcc 180  
gaactagatc aagtgttcgg tgccaatccg aaaattggac tttagaaaaa aagggtgcttc 240  
tgccgtgctt taacatgaca catcctatct caaaacttca agcgggtcag cctacagctt 300  
caacctccta tcccgaaagc agagtacttc ttactaggcc cgtttagcaa actacactct 360  
atcggctttg agagagaaat taagctccac cgctagcgac cgcacacttg tgtcaaaaaa 420  
aaggattggc aaatactact aacaactttg cagcgactac taagaaaaac acttatcat 479

<210> 7627  
<211> 350  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-G8

<400> 7627

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gctttaccat attcttgccg gttcttaggt tatttggaac gaagacacct tcgaggccag 120  
gttgatcgtg ctcgagcgtg gtcaataacc tcacggactt agtttatcca ttgccacagc 180  
gcaagctcgt gcaagtttgt actccgatct ccaaagtcgt ttccaacagg tcgatagtta 240

tcattctcagt gaaagatcgg gacacgctct cctctagtaa gtgagatcag ttttcaagat 300  
gctcagtaag aatttctagt tctcatagat gagatgtata ttcttaccta 350

<210> 7628  
<211> 365  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-027-Q1-E1-H10

<400> 7628

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caagagccta agcttgggga ttaccaaggc accccaaggt aaaattcaag gacatccaaa 120  
agcctaagct tggggatgcc cccggaagga tcccctcctt cttcttcgtc catcggtaac 180  
tttacttgga gctataat ttttaccac atgatatgtg tttttcttgg agcgtcntgt 240  
antatttgag tctttgcttt ttagtttacc acaatcatcc ttgttgtaca caccttttga 300  
gagagacaca catgattcgg aatttgttgg aatactctat gtgcttcgct tatatctttt 360  
gagct 365

<210> 7629  
<211> 377  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-H12

<400> 7629

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atgtatcctg gcgatacccc ctagctggag ataagctacc agttgctcct tgaaagcgaa 120  
cgatgaaaga ctgcacatga cacatagatt gagttttgtc cacggatgtc atctcccccc 180  
tgccctgccc ttatcttgcc gtccccaagc caacagatgc atgtgcgttc agctgacgcg 240  
gatccgttgt tgatgagacg tttattacca ccgaaaaatt acgattcctt aagacgaaga 300  
tattggcaga attcgaaaag gagaatgaat ggcgactgtc aagtcaggta tggaaacgtg 360  
cactggtgcg agctaaa 377

<210> 7630  
 <211> 189  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-027-Q1-E1-H2  
  
 <400> 7630  
  
 gttctgaaac cagggatgcg caaggaagct gacgagcgaa ccgggagcag cccagcttga 60  
 gaatcgggcg gctgtgccgt ccgaattgta gtctggaaaa gcgtcctcag cgaccgaccg 120  
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 tgtcgcccc 189

<210> 7631  
 <211> 459  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-H4  
  
 <400> 7631  
  
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 ttttcaaaaa ggaaagtga agttataaag acaagcattg ttgaagtga agagctcctt 120  
 gaactttgtt catgctcacg ggaactctgt gaatcttgat ttacaaaaaa tttcaaacia 180  
 aaataattat ccctttggtc aattccaacc tattaaaaaa ataatgggtgc aaaggttggc 240  
 ttttaaggagt ttaaaatgct tgggtggtttg tacggtgcaa ggcaaaaacc ttgggtgtaa 300  
 tgccccaatt taaaatttta actggaaagg caaacgggtc cgatttccttt tgcactgtct 360  
 ttctgtacaa agtttcta at tttcccaagt tttgggttaa tttttggggg accataagta 420  
 ngtttaatgt tcagatttct acagactgtt ctgtttttg 459

<210> 7632  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-027-Q1-E1-H6



<400> 7632

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gggtactcgta gccgtctgtt tttacttttt tttttacacg gagaggtgct catctttttt 120

cgctgctgta tgcatgggta gctgtcagtg gcatgttgca gaaaaggaag gcgactgaat 180

tacatactgt aagtagaagt agcagtggtat gggaggtccc gttgggagta gggagcacag 240

ccaagttgac agtgttggtt atttcgacgt gtaaacttgc tagtactaag ctgcttaatt 300

acagtagctc attatgaaga ggaattgagc gaaaaacaan aaagaaaagg aaaaaaaaaa 360

agcggccgct ct 372

<210> 7633

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-027-Q1-E1-H8

<400> 7633

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gatcctgcaa catgagacgt tgcagccaca aagggtcagt acattgaatg tactggcaaa 120

ttcacaccaa agagcaatga tgaataaagg ctatcactac atgcatatat ggctgggtgga 180

aagctctatg gttacagttt ttgcaaaaag ccaatttttc cctactacaa aggaataaat 240

tttacttact atcattgtgg ttgtttaaca atgagaatgg ttgacactat tctcaatccc 300

aatttaacat catcattaaa acccaacaaa atttattata agtaacatga ttagattaac 360

atgataatc 369

<210> 7634

<211> 281

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-A11

<400> 7634

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atgtcaagct gttaattgtc gtgatttgcc gggttgaact ctacatgttt gccaatatac 120

ctgtgcagcg ggtgcaactt tggcacagtg aactattact tactttgtga aaacaaaaac 180  
gataaaaggg aatacacagt gcgggtcccg cgctcggatg gatgcttacg taggtatgca 240  
tgcaacctca gtgatattcc atcgagggac ccacttacat t 281

<210> 7635  
<211> 415  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-028-Q1-E1-A12  
<400> 7635

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cagttcagct agaggaagac gaaggcggtt cgatcagtc gatctcctgc tccttttaca 120  
tgatgattac tattatctta atcttagtgc atgtgtatgt aatatgcacc atgaattggc 180  
agtgcagtgc agtgcagcac agcacatctc tgaacctggg aaggtactac tagctttctt 240  
ttcactcaga caagtcggga gggggtttct tgtcagttag tcggtttctg gcttgtcagt 300  
agctgtggcg cgtgtcgtgt ggatcgagtt agttgtacta ccagaaattc ggaatgacan 360  
tggaaccatg catagcanan nnaannnnnn nnnnnnnaaa aaaaaagccg gcggc 415

<210> 7636  
<211> 393  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-028-Q1-E1-A2  
<400> 7636

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ttgccaaatc tcatgcgtgc aatgcacgtg taccttactc tagtctaaat ggtgtttctg 120  
tgcttagttc tgctgagctg tacaactctg aaactaaaag ttggattaca cttccaagca 180  
tgaacaagcg tcggagaatg tgttctggag tcttcatgga tggcaagttt tatgttattg 240  
gtggaatggc cagtaacacg gaggtgctga catgcggtga agagtatgat ttagagaagg 300  
gcacctggag gttgatagag aacatgtccg aggggctcaa tggtgccagt ggtgctcctc 360  
gccttggtgc tgtaattgac aatgaactat atg 393

<210> 7637  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-A3  
  
 <400> 7637

ggccatcaa gaagagcagt aatataaagc ttttgagctt aagcacatga atcaagcccc 60  
 cagaatccga tggccactg agccagtttt aagttggcga ggaatggtgg agcactgaac 120  
 cttgccacac aacggcaccc ccttcgcctg atgacctttt ccgatcacga tgacctcctg 180  
 tcgctgctga acgaattggg aacagtactg gaggaattgt gatctatgtc aagggatgatg 240  
 atgtctatgg aaatgattgt tgagtgttat gatacatatg gtgatgaatg gtgacgaatc 300  
 taatgtcttt cgtcaagaca tgcaacaaag tgaagttatg aagttctggt caatttagct 360  
 tatgcataat gct 373

<210> 7638  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-A4  
  
 <400> 7638

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 aaaacctttg aaccattaa aaaaaatta aggaaccac aggaacgata ttttgcattg 120  
 attcttagtg caggatgaca atacagcaaa tttcatagga catcatatgt tggtacgatt 180  
 tttgaagtgc cagaagttag cgtaggtac atattgctat aactgtact gtttttgaca 240  
 gattctggct ttcgtgtgtt gtatgcttag tttgatgcac ctatggctac tatgtaaggg 300  
 tatgaacct agacaacttg gaatacagta tgtttaacac caagttaa atacagattgag 360  
 ttcattacag taccttacgt tgtggttttg taatctttca ct 402

<210> 7639  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-A5

<400> 7639

ctgctgataa acagaaactt tgtgctgctg aatttagttt tgttaaataca cagaactttt 60  
tcattgattc gtttttcttc tgatcaatat acaaatttta caggacttcc tattttggta 120  
ggatttttag agttccagaa gtttgcgtta gttatagatt tctacagatt gttctgtttt 180  
tgacagattc tgtttttcgt gtgttggttg cttaacttga tgcatttatg gctagtaaaa 240  
tagtttataa accatagaga aattgggata cagttggttt aacaccaaaa taaatacaca 300  
atgagttcat tacagtacca tatgtggtgg ttttgttttc tttcactaac ggagc 355

<210> 7640

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-A6

<400> 7640

attcccggcc cgacggggtt gctataatca aagacgcatt gcccctaatg cctctagaaa 60  
gatccgaagt aattcgagct gtaattgtac gtacatgtaa agagttcaaa tgccaagacg 120  
gtataataat ccgctatgat gacaatgctg cgggtataat tgatcaaaaa ggcaatccaa 180  
aaggaactcg agtttttggc gcgattgccg aggaattgag aggattgaat tttaccaaaa 240  
tagtttcatt agctcctgaa gtattataaa tactagtagg cgaaattgag atcaaagaat 300  
taatttagta gattgtgttt tacgtatatg ttttaaaatc caaatgaaa aaaaaaaaaa 360  
aagaaaacat gttgattata gaaaaat 387

<210> 7641

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-A7

<400> 7641

attcgcgggc cgacgggcag aacatcctag atacatttac aaagcttttag ttaacatgca 60  
tgaactattg tctcgttcat ataaaaagat caatgtacga gccacgtaga caccgacatg 120

acaaaactaa aaagacatta gaacatcagc cttttgcaca aaggattatc agccaagaaa 180  
gaagattaca atcaggaccg actacatcct agagcttgag tcaaaacgca catcacttgc 240  
ctccggcaac atcacagcaa ccaccaaaga aaaaaataat ggatcacctt ttcacccaag 300  
ctcaatgtgg ctccaacgct aatatgcaat ttttcagtcc tccaaaatag cttaccaaatt 360  
gatgggtgtcc cggttgaggg gcctctcacc atgtcgaatc ctggcctggg tgggccaacc 420  
tgaggacccc ttgtcgggtt cgacttgggc ca 452

<210> 7642  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-028-Q1-E1-A8  
<400> 7642

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tcgttcatat aaatggatca atgtacgagc cacgtagaca ccgacatggc ataactaacg 120  
ggacattaga acatcagcct tttgcacaga ggattatcag ccaagaaaga ggattacaat 180  
caggacggac tacatcctag agcttgagtc agaacgcaca tcacttgcct ccggcaacat 240  
cacacgaacg accacagaat aaaataatgg atcacctttt caccagagc tcaatgtggc 300  
tccaacgcta atatgcaatt tttcagtcct ccaaaatatc ttaccaaattg atgggtgtccc 360  
ggctgagggg cctctcacca tgtcgaatc 389

<210> 7643  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-028-Q1-E1-B1  
<400> 7643

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tccttcatga aggtccgctc gtgggtgcct tactcctttg aattgtccg ggtgaaaact 120  
caatctttgg gatcggatgg tggcggtat cagtggctgt ttggcaccat cttggagtcc 180  
ttgttccgctc gttttccgctc tcacctctcc tcggaggatt ggaggactcc gttggctcca 240

agcggatcat cctcgcgtat gtgtagtggc tttgtagtca ttgggggtggg gtggcggtgc 300  
tcggcaccct tgtatcttgc cttgagtgtg tgtgtcgtgt gtgggtgggtgg cgtgagtttg 360  
tatcgtcgtg atgctttgtg attgggtgcct t 391

<210> 7644  
<211> 284  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-028-Q1-E1-B10  
<400> 7644

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gaaataacgc tgttgttcaa tcatcaggct ccggttcagt actgcaccaa gctgtgattt 120  
ttgcctatct tgaaaataag cacatgctgc tgtgtttatt taaacaccat gaagcgcata 180  
catgaaagaa ggcattgacat ataaaaagat taagcatcaa caaaaacgag gccgctctta 240  
aggatcaagc cttccttttag cgtcaatacg acgtcatacc tctt 284

<210> 7645  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-028-Q1-E1-B11  
<400> 7645

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tatattatct attttggatg ttaatgggct ttattttaca cttttatatt atttttggga 120  
ctaacctatt aaccggaggc ccagcccaaa ttgctgtttt ttgccaattt tagagtttcg 180  
ccgaaaagga atatcaaacg gagtccaaat ggaatgaaac cttcgggagc gttatttttg 240  
gaacaaacgt gatccaggag acttggagtg gacgtcaaga aacaatcgag gaggccacga 300  
ggcagggggc gcgccctcca ccctcgtggg cccctcattg ctccaccgac ctacttattc 360  
ctcctatata tgtccatata ccccgcaaac atcca 395

<210> 7646  
<211> 213

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-B12  
  
 <400> 7646  
  
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 ttgggttgta aggggctcta ctttacagtt ttatattatt tttgggacta acctaataata 120  
 cggccgcca gcacaaattg ctgttttttg ctacttttag agtttcgcca aaatggaatc 180  
 tcaatacggga actcgatatg gcacaacacc ttc 213

<210> 7647  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-B2  
  
 <400> 7647  
  
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 cgggacacct ttgcctctat caagtgggtat cagatttcca ggttgctcgg tgagatttta 120  
 cagttttttg tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac 180  
 aaaaaaaaaat tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt 240  
 ttaggggttt gctttgttga atttgcgggt gcacgtcgt gtctagtgtc tgggtcttaga 300  
 gtctagtctt ttagagtttc gagttctgggt cataagttgt caccgcccgc ccgcaccatc 360  
 atcatcacc ctgccatcta ccaccaccgc ttatccgcca ccgcttcgaa tccgtatcca 420  
 ta 422

<210> 7648  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-B3  
  
 <400> 7648  
  
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 aaatattatt ggaaaagggg ttattcaaga tttatttact tgtgccggtg tgttacccat 120

gttaggtgga tctattctcc ataaaactag tagtcttggtg gatgctatat ctttgcccgt 180  
 agttgaactt gaaaggcaat ttgttcatat gcatccatcc atacaaagga tttttctaga 240  
 gtttcccaat attgagcatt attctattaa gcgcgccgcc actatatttc tagcaaatga 300  
 gtttagattt attatgaaag aagctagtga aattttcgcg cattataaag tagatggtgg 360  
 tcatcctcct atagaag 377

<210> 7649  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-B4

<400> 7649  
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 agattcagga cgagctcgag aaggttaatg aagaagcaag tgataagggtt ttggagggttg 120  
 agcagaagta cagtgaagatt cgcagacctg tctatcttcg gaggtgtgac atcatcaaaa 180  
 caattccaga cttttggctg acagcggttc taagtcatcc tcttctcagt gagcttttga 240  
 ctgaagagga tcaaaagatg ttcaagtact tggaatctgt tgatgttgat gattctaaag 300  
 atgtcaagtc aggctactcc atcactctta acttctctga gaatccgtac tttgaagaca 360  
 gaaagcttac caagtcatat gcctttgctg atgatggaac aaccacaata aatgc 415

<210> 7650  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-B8

<400> 7650  
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 agctctgttg gtgaagacaa cagcaagcag cgggggtcca acgaggatgg ctgggaactg 120  
 tgctgaactg aagatggctg aagatcgta gggtttgctt gagtttgctc catataaata 180  
 aataaaaatg gcggtaataa tcatttagaa ccgtctctat tttgtgag caaaattagt 240



gaacttgccg gacttgatcat ggaatagctt tgcccttttgg gaggcgactg aatatcagta 300  
 agttaaaatg gtgctgacat gatatgtata taccgagatt ctagcttaat ctatagtata 360  
 aataaatgat tgggtgccatg tcaatgccaa ttttattgcc acacanaaaa accnaaccaa 420  
 aggaaaaacc aaaatcaacc ccaaacaa 448

<210> 7651  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-028-Q1-E1-C2  
 <400> 7651

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 acggccgtgg aggcgtgccc tgacgttggg tgaaggcgct caaggcaaca acgacgacct 120  
 gtcagggcag gcaagccgca cggcgagttc atggcttaga aggtgagtgt tggaataagc 180  
 cagcccccac gtcctatgat ccggccggtg cgtgcatgct gatcaagcca gttcgggtggt 240  
 ccgcagtcgt ggcgaagtgt agcgtgtgtg cacgctcgaa tggggcgcat ggccgggtgt 300  
 gttgttagtg tatggcgtga gtctgttgta attttgccc agtcgctagg acgtg 355

<210> 7652  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-C3  
 <400> 7652

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 ctagtgtccc acttatatct tttagagcac ggtggtctct taattttgaa gaaattgcta 120  
 gtctctcatg cttcacttat atatttttag agtccttttag aatagcatgg tacttgctgt 180  
 ggttacaaag ttggctcctag aatgatgagc atccaagttg ggtataataa aaactatcat 240  
 agaaaaagaa ttggatgtta tgatcaatat gatgcttgat aattgttttg agatatggag 300  
 gtagtgatat taaattcatg ctagttgagg tgattatgaa aagtacttgt gttgaggggt 360

gtgattcccc tagcatgcac gtaggtgaa ccgctttgtg at

402

<210> 7653

<211> 331

<212> DNA

<213> Triticum aestivum

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<400> 7653

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catagctgtc actacctga cacaattccg gttgacggtc atcatggatc taagcgattg 120  
gtggccatga aatctgatgt ctgcgtgggt gtagatgtcg ctctatatgt ttaactttta 180  
tggtcctgta agtctacgtc ataactcttc tatgatgtct gctacgttta ttccattggg 240  
cttcgttttt taacttcgtg atgggtgatgt ccctgtcttt atccaactta ttcacctttg 300  
atgcacattt tttttctcc aactggcgta c 331

<210> 7654

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-C8

<400> 7654

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ggtggcgggc gccacggact acggcaagaa gctagcgagc accgtgtact ataaggctcg 180  
cggcgtcggc acggccgttg cgagcaaggc ccagaatgtg acgacatcgg ccggcactga 240  
ggtgctttac ggcgcggtc caacgataaa cactaatgtg ttgtgaactg cgccgggggc 300  
gatcgtggga tcgctggaga aagtcgcctg cttggtggtt ggggttcact ggggcttcac 360  
acggttctac acgtgtt 377

<210> 7655

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-C9

<400> 7655

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aagagaaagt acaatgtgaa gtggaatgac gaggtcactg cggaagacat ggaggcctac 120  
cgtatgacaa gagtccgcca cgacgattct aagaaagatt ttccaatta agcgttcaag 180  
tcccctgtgg ttgcttgccc tatgcctgaa ccctttctgc tgcgtgtcaa ccctttgccg 240  
gattgttgtc tctgtactct ctgggtgtct aggaacacgg gatgggatgg catgccagct 300  
cgtgagttac tgatgttgtg aagtacagat atgatcgctt gatgtccaaa ggcagaacga 360  
agtttgttct catatgtcct ttgaaacctc cttcctggta accatggcat acgccactca 420  
tatggatat 429

<210> 7656

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-D1

<400> 7656

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ctccgtggaa agaagagaaa acccaccgtc agccatggcg aactcggcgt cgggcatggc 120  
cgtgagcgac gagtgaagc tcaggttcca ggagctcaag gcgaagcgaa ccttccgggtt 180  
catcacgttc aagatcaacg agcagtcgca gcaggtggtg gtggaccggg tggggcaacc 240  
gggcgagacc tacgccgact tcaccgccac catccccgcc gacgagtgcc gctacgccgt 300  
cttcgacttt gacttcgtca ccgacgagaa ctgccagaag agcaagatct tcttcatctc 360  
ctggtccccg gacacgtcca gggtagggag caagatgctg 400

<210> 7657

<211> 184

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-D10

<400> 7657

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 aaaaaaaaaa aaaaaaaaaa aaagaagaaa ataataaaaa ataaaaataa atgcgggacgc 120  
 acaaaagggtt cgatcctcac gttcgcgttc aagttacggc tcatcgcttc gttactgctc 180  
 ccca 184

<210> 7658  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-028-Q1-E1-D2  
 <400> 7658

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 ggacgacgac atctcccgtg aggtccagcg cctagatgct gatatggacc gattcatcag 180  
 ggcccagagt gagcgcataa ggcagtctat attggagaaa gttcaggcaa agcagtttga 240  
 agcgctggcc tctgttgaag acaagatcct ccgaaaaata cgcgataaag agtcagaagt 300  
 gcagaacatc aacaaaagga acctggaact cgaggaccag attaaacaaa tggcagggga 360  
 agttggtgcy tggcagcaac gagctaagta caacgagagc atgatcagcg cact 414

<210> 7659  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-D3  
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 tgtgtacaga ataattcctc gctatcaggt ggtaataacg caccggaacg gacgctgttc 180  
 ttgatgcgcy gaatggcaag gcaaagcatt ctttcaccga gcaatggtga ttgacgactt 240  
 gattacagac aagatagatt tggcacattc ttacctgtaa agataatttg ccaaataaag 300  
 ccgtttataa gctttgccac tttgataatc tcttgtactg acacaatttg aaagaattcc 360

tttgagaaca aanaattaaa aaaaaaaaaa aaaaaaaaag cggccgctc

409

<210> 7660

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-D4

<400> 7660

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ttccataagc acgtatgact atttacggaa tacatgccta cattatatcg acgaactgga 120  
gctagtgcc a tatcgcccta ggttataacc gtctcatgat gaatatcatc caacaagtca 180  
ccgatccaat gcctacgaat ttatcttata ttgttcttgc taagttacta ctactatcat 240  
cactgttaca cttcctaaaa aactgttgct atcattgtta ccgtttcctt tactgctact 300  
actattatca aaactatcat attactttgc tactgatcac gttgctgcag ataattaatc 360  
tccaggtgtg gttgaattga caacttagct gctaatacct tcaaatatte tttggctccc 420  
cttg 424

<210> 7661

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-D7

<400> 7661

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gttcgcagtc aaacaatgtg gcaaatggca atctggaaaa cacacacgaa gtgcaggtga 120  
accgaatgag cttatctcaa tacagggaca tccatagaaa gattgttgag tttatcagaa 180  
agagatacca tattctggaa aactgcttgg acattgaata tgccgtgata aaaacatata 240  
ctcctgttcc tgatgatctt actgaacaaa atgttcctat gggacatagc ccagctgttc 300  
cagatatcag tgaagtgttg agagaacttc cccctcttgt accaatttct gccatagaag 360  
tggtttctga tggctcaact gaccaagcac aactttccca acc 403

<210> 7662  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-E1  
  
 <400> 7662  
  
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 cacgggtgat caatccgctc ttccttcttt tgttcttcgc tctcctcctc atctttttca 180  
 tccaatgagc tcacagtttc atcaacttct tcttccatag acttctgcaa aatattagtc 240  
 tcttcttggg cagcggggta atcctcagta tatagttcaa cataggcatt agaagcataa 300  
 ttatcatagc aatatttaag tatggcaaat ttttcagact tgtaaagagt agcatcatac 360  
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<210> 7663  
 <211> 450  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-028-Q1-E1-E4  
  
 <400> 7663  
  
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 gaacctcgat cgatcgtagc tcgtgttccc tctccttttc gcggcgatgg cgggtggatct 120  
 gaccccgagg cagccggcga aggcgtacgg cggcgaaggc ggtgcctact acgagtggag 180  
 cccagccgag ctgcccattg tcggtgtcgc ctccatcggc gcagccaagc tctcgctcgc 240  
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 aggcaaggga acctgcggca tcgtcctgcc tgaggccacc aaggagaagg tagtcgccgt 360  
 caaggagggc gacgctctgg cgctcccgtt cggcgtgggc acctggtggc acaacaaccc 420  
 gggggtcggc aacggagctc gtcgtcctct 450

<210> 7664  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-028-Q1-E1-F10

<400> 7664

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ctcaacaaga ttgtcaaggg ctgtgtcgcc aacgtcgccg ccaagcttga gattatggag 120  
ccctgctgta gtgtcaagga caggatagga atcagtatga tttccgacgc tgaagagaag 180  
ggcttgataa cacccggaag gagtggtttg gtggaagcaa caagtggaaa cacaggaatt 240  
ggtcttgctt tcattgctgc ttccagggga tataagttga tactgacaat gccacatca 300  
atgagcatgg agaggagagt cctactcaag gcttttggcg ctgaacttgt gctcacagat 360  
gctgcaaaag ggatgaaagg ggccttagat aaagctacag agatcttgaa tangacaacc 420  
aattccatac atgcttgagc agtttgacaa ccctg 455

<210> 7665  
<211> 422  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-F2

<400> 7665

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caccttctta gtctcaggtg gagctgccat tgccttctta cacttgccga tggagctcga 180  
tggcgcgctcc tcgacgggtg cgcggcactc cgaggaggtg cgcttgccgg agtaggcata 240  
agagctcttg ccggacttgg tctttttctt caccocggga gcttcagcgg caagtgtcct 300  
ccgtttctgct gcagggtgctg cttcccggtg gatcttgctg gcacaaataa gagcatcctt 360  
cttgtcgcca gggacagaga tgacacttat tgggcctggc attttcagta cgttgtacac 420  
at 422

<210> 7666  
<211> 423  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-028-Q1-E1-F3

<400> 7666

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gaaccgtttt cattgttaga tttatcacct tgagatattc gaaactggat cccaagttaa 180
tagatttcca tgatattgtt tccatagaaa agttgaaaat aaaaaaaatc caaaagagtg 240
aatacccaaa aaacaaaatc caaaaaaggc caaaaattgg ttcattgcaa aaaaatgatg 300
aatactgaaa aaagaaggaa aatattgaat catggaagaa cggtttgcag ttttgcactt 360
tttttggaag cacatgatgt gcttttccta tttttgaaga agcataatta aatttgtgct 420
ttt 423

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<210> 7667  
 <211> 292  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-G10

<400> 7667

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ctattgcgat gcatgctgct gatagctcat ctacacttgg togacactct ttgtctggga 120
gttactggta tatcgagaat gcttgctcta aatgatggat atggtaaga ggaagggatt 180
gacgaggctc tcaaagtaca tagctagtga ttaccatcag catccaacgg aatgatagtc 240
cttcgttaac accgatgagg ttcattcaatg aatggtatat gtacgcatct tg 292

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<210> 7668  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-G4

<400> 7668

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cagttagtca aggcaatgcc gagtcttatt ttacaaaag tccaggaaga caattgtact 120

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tcgtcaacat gtgccatttg cttggaagac tacagtgttg gtgaaaagat aagggtgctg 180  
ccttgctgtc acaagttcca tgctgcttgc gtggacctgt ggctcacatc atggaggaca 240  
ttctgccctg tatgcaagcg agatgcaa at gctggaatgt caaatttccc tccatcagag 300  
tctacccctt tgcccttctt tgctattccc ttgccagctg aatcgacagc tttgtcttct 360  
tttcgttcaa tggtagcagc atctcctcca aggacaataa g 401

<210> 7669  
<211> 405  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-G8

<400> 7669

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cccaatgccca tgaatgctgc tgaaataaca gataagcttg gtctacactc tttgcgtcag 120  
cgacactggg atatccagag tgcttgcgcc acaagtggag agggctctata tgaagggttg 180  
gactggctct ccaacaacat agccagcaag tcctgaaggc ttccaatgga ttggcagggc 240  
cgcagaagca actagcggct ggacaaatga ctggaatatg taggcatgtt aaaatgctgc 300  
cagagtgttg acatgtcttt gtaagctcga tctttgagct gttatcacac tgctactatg 360  
ttgtatcaat gattgaatgt acacacgatg aaacccttta tgctg 405

<210> 7670  
<211> 356  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-G9

<400> 7670

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ccaatgccat caatgctgct gacatatcag ttaagcttgg tctacactct ttgcgtcagc 120  
gacactggta tatccagagt gcttgcgcta caagtggaca gggcttagat gaagggttgg 180  
actggctctc caacaacata tccagcaagt cctgatcgct tcgaatggat tggcatggcc 240  
gcagaagcaa ctagcggatg gacaaatgac tggaatatgt acgcatgtta aaatgctgcc 300

agagtgttga catgtctttg taatctcgat ctttgagctg ttatcacact gctact 356

<210> 7671

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H10

<400> 7671

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gagtacatcg acgccaccaa ccggcgcggc gacctcacct acgagctcgg cgagaatgag 180  
ttcgccgacc tcaccagga ggagttccta gccaggtagc cgtcgctccta cgatggggtc 240  
ggatgatgata ctggcatcac gttgcctgtg ggcgggtggcg acgccgagct gtggtcgtcc 300  
ggcggcgaca atgatagctc cttggaggct ccgcctccca gctgggactg gagatccaag 360  
ggcgccgtca caccggtcaa gtcccaaagc gcaggatgcy ctacctgctg ggcgttcgtg 420  
acggttgcca cgat 434

<210> 7672

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H12

<400> 7672

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acaaatataa ttttggttaa tcacaggaac gcgattttgt gttgattcat tttgctgata 120  
atcaataaac aaattttcca gaacttccta ttttggtagg attttttagag ttccagaagt 180  
ttgcgttagt tacagattgc tacagactgt tctgttttta acagagtctg tttttcaagt 240  
gttgtttgct tatttcgatg catctacggc tagtaaaata gtttataaac catagagaag 300  
ttggattaaa gtaggtttta caccaaaata aataaagaat tagttcatta cagtacctta 360  
tgtggtggtt ttgttttcct 380

<210> 7673  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H2

<400> 7673

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aaataatact gaaccgagac cacttccaag ctagttcaag aaaggtttagc cttgcgcggg  120
aactgctgcg caagctgctg agcaaggctg tgagaccggc ctagcatgtc ggcatagct   180
tccaggtgta gctgttttagc gttgaggttc tcattggtgt tctccgcaat ctttcttaga  240
gataggactt caagtcaaag ttgagttgca gaatgccttt ctgctagaac ttgggactga   300
agaagtcgaa ctgattcaga caacaaattc tgtgagcttg tctgactgct agtctcaagt   360
aacttgaaca ctgcaacagg acaagacttt ggggttgtct cgctatcttc a           411
  
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<210> 7674  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H3

<400> 7674

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tttcttttat gcaccatgat ggtatgagat agtccttggt tgatttatag aatgctcatt  120
gcacttcact tataatctttt gagtatggct ttatagaatg cttcatgtgc ttcgcttata  180
tcatttgaag tttggactgc ccgtttctct tcatatagaa aaccgccatt tgcagaaaga  240
tcttttgctt cacttatatt tgttagagca tgggcatatc tttttagaaa agaattaaac  300
tctcttgctt cacttatatc tatttacaga gttgacagga attggtcatt cacatggtta  360
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aataattttt                                     429
  
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<210> 7675  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H4

<400> 7675

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tcaacgacgc cgtcttcacc gacagcggcg gcccaccca gaggaagttc gagaaggacg 180  
acctcatccc gcccaagccg ggatcgtacg tcaccaggct cacacgcttc gccggctgct 240  
tgccgtgcaa gcccggaag ccctgctaaa cctaagtggc cccgccggcc ggccggagcc 300  
gatcccttcc gaatcttcaa ttattgcttt gttcaattct ttactcaaa gattcgtgta 360  
tgtattatgt attactagga catttgagta gtctacgggg gtcaagtccg aggaccctgt 420  
aggttgttct tgtacctgca ttc 443

<210> 7676

<211> 357

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-028-Q1-E1-H8

<400> 7676

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agagcttata tatgaaaact agtgagagag agaagactat atttatgcaa ttagaagaga 180  
actatataca ttgtttttcc cctaagctca ataaggtctg tgccttttgt ggactgcgtt 240  
tcttctttgt agagacagaa catataatac tgaggattgc agtcaaatgg aaattaaatt 300  
caggtttgat actttaataa aaataacagc anaaaaaggg ggagagaaaa cgaaaaa 357

<210> 7677

<211> 284

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-028-Q1-E1-H9

<400> 7677

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tcttccatca tacttctcca tgcagtggca cactgaaggt gtacagatgc ttcacgggc 120  
aacaatgtgg aggctgtcgt gtgctcatat atatgtaaca tctctagata cgacacaata 180  
tttatgccat ctataactat cacaagagat agtattgtct cataagctct gtaaggactg 240  
atgttctccg tcgattgggt ctattctgtg tagcaacatc atac 284

<210> 7678  
<211> 397  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A10

<400> 7678

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ggctgtgtcg cctcaagttc ctctctctcc gagggcatac tgagatcgat catctaccaa 180  
gttcattagg ggatctcagg cagctccagg ccttggacgt cagggacacc tccatagtga 240  
ccctgcctgc gagcatcacc aagttaaaga agttgcagta cattcgtgcc ggccgtggca 300  
ccaccgtctc agcactacct gcttcacct gctggttgcc cgatttctgc aagtgccgtc 360  
aactagttga tgttcaagtg cccggggaaa ttgggaa 397

<210> 7679  
<211> 415  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A12

<400> 7679

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gagttgtgca caaaacaatt tgatgctgca gcagaatccg agtcaaacta caagtccaaa 180  
gggtgttacat cacctccact tgggcccacg agccttgat gacctaaggt tagttttagg 240  
ctgccttggg acgtcctccc acctccttgg ccgccacccc ttcctcctat ataagtagat 300

ccatctagta gctttttcct tgggatttgt ttagttaaaa gttagccatt gcaacttcgt 360  
gtacttcggtt tgtgtccaac gaccagacca agaccactta cggattccca acctt 415

<210> 7680  
<211> 236  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A2

<400> 7680

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cacgatccac gtttagcggtt tcatcggttg cactggcggc aggatctcgg aggcgccgca 120  
gcattccggg ttccgtatcc agtcttccgg atatcgcggtg agtgtcttcg gatctatcac 180  
gtgtgggtct tataattctc cttctcgacc tgccagtact gcctcattgt cgtcat 236

<210> 7681  
<211> 435  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-029-Q1-E1-A3

<400> 7681

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ccacgcgaag gcgacgacgg tggtcgcggt aatgacgatg acaagcgcggt tcaccgtgag 180  
agtttccaag ctggaattcg agcgaaagaa gaagggggcg actggggaaa gaagggggaa 240  
tggacgaggg cggctagggg ttctggttga cgcggttata ggccatgggg gagcacgtgg 300  
aggccatcca tggccacggc agccgtggga tggatgccat gacctcctct gaacgggaag 360  
aangggattg ccgttaagtt ggccctggact atgcactgta ccagtgggct acaagtgcac 420  
agtagtagtt aggtc 435

<210> 7682  
<211> 440  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-A5

<400> 7682

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ctaccgggag ccaaggtttt acaccaaggt gttaaggaa tgccactcct atgaccaaga 180  
tggaattcc tttagctttt ctctggtaac ttccaagtgc attggagctt atgtgaagag 240  
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aggctttcag agattcctgg acaatgtgca gtacaaatcc actggaatcc tgcgttatga 360  
acgcttgttt ggggaaggtt tatttcacca ccggtggatt cgagaccaca aaagaatttg 420  
tggaacaagct ggatctgaaa 440

<210> 7683

<211> 461

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-029-Q1-E1-B1

<400> 7683

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attgcccatt tgtcccctgg atgggcgtgt aactagagaa caaaacacta tggcggcaaa 180  
cgagactatc gaaccgaact gattgtactg aaaactagga cctaaacttg tgctgctggc 240  
caaccttttc ttcagggaat gccagatat tcgccaacaa aagccatagg atggtgctat 300  
acacagagga caacctatca gcaagtcggg ctccagtgtg tttgggtcag cgtccacgga 360  
ggagcagata actgacgaca ttacgnctg ccgggttcac aatcctcatc acacatgacc 420  
acaaccacc caaccgactg ttacaatggg cgtggagctt c 461

<210> 7684

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C5

<400> 7684

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gtttggcatt tcccagaaaa agtgtacgaa aatgaagact ctttgcgttt gtgtgccgag 180  
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atggctcaca tggtaactga acaaaaagag gattocagtg tttcaccatt caagcggttc 300  
ttcttcaagt cgcaagtgat cggcaccacg catttggaaca tcaggagggtg cgaagaccac 360  
gcgtgggtga ccaaagctga gttgctgg 388

<210> 7685

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-C9

<400> 7685

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accacatcca ctaagtcagc tctatctctc tactactgca actaactaac tgtgatgatc 180  
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tgtttattgg gacgtacaag cggggcggca gacacatgg cggcaggaga caagccatat 300  
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gcaccgtttt ttcttagttt ctttccaagg cactcaat 398

<210> 7686

<211> 344

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-D12

<400> 7686

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tctctcattt tgagtccctg tatgagcaac ggtacaagaa gactctcgac taccaaagct 180  
gtggagttga tggctctggag gaactgctta acaagttaaa agatgttgtc gaattgaatg 240  
tatatgagat cagcaacatg aaagtcatca aagccaagtc accaaaatgt agtccctcaa 300  
agccatgtta aatagtgggt gtcctaatat cagtagtata gtca 344

<210> 7687  
<211> 448  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-D4

<400> 7687

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catgagcatg cagcttggca atggtgactt cccacaggag gaaatgattg gaagtttctt 180  
gaaaaatggt cccttgtgtt atatggctta tcgcaacata ttccccatat gggcccttgg 240  
agagtatcat agattagtag tttgctctgg ctaaactagt accttctggg atgaaggaat 300  
taaatgtcgc tcctctgctg gcaatgctga aagagcgatg tcttgattta catgtcttga 360  
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cataatagta taagactatg ttgtaatc 448

<210> 7688  
<211> 323  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-E1

<400> 7688

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ctacctatta tggcatttcc atagccattc cgagatatat tgccatgcaa ctttccaccg 180  
ttctgtttat tatgacacgc tccatcattg tcatattgct ctttgcattg tcatgtgggt 240

gacatcgtat ttgtggcaag gccaccttca taatttttca tacatgtcac tcttgattca 300  
atgcatatcc cggtacaaca acg 323

<210> 7689  
<211> 401  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-029-Q1-E1-F12  
  
<400> 7689

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agttagtgc agatgatgtg aagagcacat cagagagttc attggaggag cctagcacgg 180  
aggaattcca ggaggaagat gtctctgatg gagattcaga ctgcaacgac gaaagtaagg 240  
ggccggaagt aaggcttttc atcagcggag tagttcataa taaagaggag gctggagcaa 300  
aatcttatgt tcgagttccc gctgaaataa ataacctgga aagggactcc tttgaactct 360  
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<210> 7690  
<211> 457  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-029-Q1-E1-F6  
  
<400> 7690

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cgggagtggt ttacatcac tgaacctcgc ggcaaaaagt gggtagctac acctgcattc 180  
cattatgtcc ctccattaca acttgcatcc tggattaata agggggccaga ctgggtatcc 240  
gttgataaag tgcagacgct gcaaagccgc attcggagcc tcattgaaaa ggacaccggt 300  
ctcatcaata taatccaagt aatgttagtc cgtcgggtcc taccgtgtca gcgacgtcct 360  
ctctgcatgt gggaattcaa tccggaagga ccgtgaacct ttcaacacct ctctggcacg 420  
acgctccgag ggggtgtgaa attattcttc ggcgcac 457

<210> 7691  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G10

<400> 7691

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cggatactag ccattttctc gtgaatgagg agcggagtc actcctcttg agaataacca  180
gcctaacacg gaagataagg gcaactctag ttgacatatg agctattcga gcatgcaaaa  240
cagaatgttt atttgaaggt ttagagtttg gcacatacaa atttacttgg aacggcatgt  300
caataccgca tataggaagg tatagtggac tcatatggaa caactttggg gtttaaggag  360
tttggatgca caagcagtat tcccgttag tac                                393
  
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<210> 7692  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G12

<400> 7692

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tacttcgagg actacgccgc cgccatgac aacatgggca ggatggaggt gctcaccggc  120
ggcaacgggg agatcaggaa attctgcagc gcgtacgttg actaatggag ccggcggttg  180
gtcgatgtga gttggtgcgc gtgcctccat cgatcgatc gtggacgggg tcacgacggc  240
cgggtgtgcc gccagccgca aggcacttgc attattctag gggtggttag agaattgaca  300
ccgtcacacc gccacgcggc gaatcttccg gtgtatgtaa aaaaaagtcg tctctttggt  360
cttgaccgag tgcccattga gatttggcga gctg                                394
  
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<210> 7693  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-G9

<400> 7693

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ccaactgttt tttttagcat cagtacagac acaagcgctc atatacacgc gcatacactc 180  
accctatga acgcacacac gcacacctta cccctatgag cacctccgaa agacggatcc 240  
ggaaacttat gatgatgcac gggcgcggtg cacgtctggt ccgaacgttg acgatggtgc 300  
ccattttctg cagtctgcac cacattttat tgacctgcat tgtatttgta tgttgggcct 360  
ggcaagtttg actcctctcg gcgagcgat aaaaatgcc ctgggttggt gttg 414

<210> 7694

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-029-Q1-E1-H12

<400> 7694

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agccagtcga cagatcaaac aggccgtaga gagattcgtc gggctcaatt gccgcgactt 180  
gaggggtggc cgacttacgt gccaccacat gcttcaccca ccactgaagc cgtgactgac 240  
cggatctctt gtgacggcga gggcgggga gcaaagatgt tgcggggggc aaccgatatt 300  
gagttgccgg ctgccacaga aggacaccgc gaatgcacgc gcaaaagtgc gtcgccccgc 360  
ggacgcggag cgcct 375

<210> 7695

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-029-Q1-E1-H4

<400> 7695

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gatggtgatg aggagaaggc gtgcgatgcc caggagcgag cagccctctg aagctgggcg 120  
 cgtgaaatcc tctggcgga tttttggata cgtgcgagaa tccagtggta aacaagagaa 180  
 agagggcctg gcatcacctg gtgaggggga gaaaacacca cagaccaagg aaggtgtggt 240  
 ggctgctttg gggggcggtg aggaaactgg gcttactgca ggtgcgccgg tttctgcaga 300  
 gaaggcaata gcggtgatg ccgctgtggt tgagggaact ggaggtgcga ctgaagcttg 360  
 ttctgataag ctgggttctt gtgcaaattc agagaaatcg gcgagtggtc ctcggcatgt 420  
 ggaggctgta ngaggtgcga cagaatc 447

<210> 7696  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-H6  
 <400> 7696

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 ggcgtgtgtt aactgatcta atgttacacc gatttcatca tctcctcgat gacgagaaga 120  
 ttgttccgaa cagaactcat ctattatcag tgttccgttg tcagtgtgta gtttactctg 180  
 catcggaact ttgttttact caacgaatgc atactgctat cataaatgtg tcaatgttga 240  
 tcgtagcatg tcatacctgt ctgactgata caatgatcaa gtagtccatg aatgataact 300  
 cctgtgtcat ctcagtttca atcatcttga gagcccatg gaattttctg cgtcg 355

<210> 7697  
 <211> 312  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-029-Q1-E1-H7  
 <400> 7697

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 ggaagaagat gaagaagaag aagaggaaga agaggaagag gaagaagagg aagaggaaga 120  
 agatgaagaa gaggaagagg aagaagaaga agacgaggaa gagaaagaag aggaagagga 180  
 cgaagatgaa gaagaatagg aagaagaagg aggagaagga gaagaaggag aagttggagg 240

agatggagaa gattggagga gaatgagaat atcgaggaga aggataagaa ggatgagaag 300  
gagaagaatg ac 312

<210> 7698  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-029-Q1-E1-H8  
  
<400> 7698

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gcaaccaagg acacatattt gattttattc aaccaactta tatgcattag agcatgtgca 180  
tgtatttcaa atttgaatta tgcacataaa tgcattgaaa acacagttaa tgcataaaaa 240  
tgtccaaacg aaccccgaaa aatcccaaaa attgacacaa cactcctgtt gttctatgtt 300  
agcacgagaa attttttgaa agcaataaga gccatggata tcatttcgtc cccaaatgtg 360  
ggacgtttcc ctacagaacc atcacacttg ttgtgagaag ctctgctttg tgagaagcat 420  
atccccaaac ctgcctca 438

<210> 7699  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-029-Q1-E1-H9  
  
<400> 7699

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aggaagatga tactcgccgt gctcttcgcc aactccgagg gcaacatcct catcgagagg 120  
ttccatggcg tccccgcgga ggagcggctg cactggcgct ccttcctcgt caagctcggc 180  
gccgagaacc tcaagggcgc caagtccgag gagctcctcg tcgcctcca caagtcggtc 240  
tccattgtgt ataccatgat cggggacgtc tgcctgtaca ttgttgcaa ggatgaatat 300  
gatgagcttg ctttggtgga ggtgatcttc gctgttacgt cggcggttaa ggatgtgtgt 360  
gcgaaaccac ctaccgagcg cctcttcttc gacaagtatg ggaagatt 408

<210> 7700  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-030-Q1-E1-A12  
  
 <400> 7700

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 agcatgattt atttattgat tgtcttcctt atgagtggcg gtcggggacg agtgatggtc 120  
 ttttcctacc aatctattcc cctaggagca tgcgtgttat actttgcttt gataacttct 180  
 agatttttgc aataagtata tgagttcttt atgactaatg ttgagtccat ggattatatg 240  
 cacttttccc catccttcca gcattgctag ccactctaata agcgcgcact tttttgccgg 300  
 taacatacac ctacatata gcttctcaa aacaggcacc atacctacgt atcatggcat 360  
 tcccatagcc attccgagat atattgccat 390

<210> 7701  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-030-Q1-E1-A3  
  
 <400> 7701

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 ccaatcaagc aaatcatagc cacctgcatg aatgatcaga aggataagtt gtggcctatg 120  
 ttgaagaagc ttggagtgc catgaagaat gatgagaagg acttgatggg caaggctctc 180  
 atgaagcgtg tgatgcaaac ttgggtgcct gccagtcgtg ctctgcttga gatgatgata 240  
 tttcacctcc cctctccttc aaaggcccag aggtaccgtg tggagaactt atacgaaggc 300  
 ccccttgatg acatatatgc aaatgctatc agaaactgtg accctgatgg tcctcttatg 360  
 ctgtacgtct ccaagatgat tccagcatct gac 393

<210> 7702  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-030-Q1-E1-A5

<400> 7702

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ttaatcogtt aggccgcgta ggtgtccagc aaaacacggc atcaatcgct ttttaatacg 120
ctttaatcgg tcgtcgtaca gaacatacat atgcatgcgt ggacgcccac tgtgcacgct 180
cacatcccc gaaagatgca gagggtgcaga cgaagagaac ttgaagaaga aagtgatttt 240
gatcgactgt tgttggtttg accaagatga acttacacct ggccatggcg cagaggccgg 300
atcgacggcc taactctcaa gagctctgat gtgaggtgaa attgaactga actcaactcc 360
attgtgctca ttcacagggc cagtcagtca gagagtcngc gtcaacgtac cctagctagc 420
tgtccctagc cacc 434
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<210> 7703  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-B2

<400> 7703

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cggatgcaag ttttgaaaaa catgaagatg aaatgcacat gatgacatgt caaagagcaa 120
catgcaagcg aatgacatgg taatgatggt gaataactgg aagacacctg gcgcatcgga 180
ctcggggcgt cacaactctc ctccactaac aaaagatctt gtccagagat cttaggaacg 240
agatggaagt gaaagagggt gaggtaaaac aagagctgaa gagagaagaa gaacaaagtc 300
gagaacactc gagggtgaaa gaggaatgat gaatatgatg agaatacaag ctcaaggatt 360
aaaatatact ctgaaaccac tcctgttaga acaagatata aaaggaataa gaatgaaaga 420
actgtgataa catctcggtt gga 443
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<210> 7704  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-030-Q1-E1-B5

<400> 7704

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gcattgttgt atcgcgacct gaatgaaata aacgaaataa tgctcttggt caatcgtaa 120
aaaaaaaaaa agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggggcy gcccaaaagg 240
ttcaaatacta attaacccctt aaaggaaagt taaaaccctt tcaaaagtgt aacaaaattt 300
aatttaatgg gccttctttt aaaaagttct taacgggaaa aacctggggt taaccaaatt 360
aaaccctttt aaaaaaaccc cccttt 386
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<210> 7705

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-B6

<400> 7705

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gctagggaga caaccggaa gttttagaga gtcatttatt tctgttgtgt gctttcatat 120
tgtttaaaaa caaaaaata aagaggggaa cctaaaactt ttcaaaaggg aaagtgaaag 180
tgagaaagac aagcattgtt gaagtgggag ctagctttga actttgttca tggtcacgta 240
aactttgtga atcttgatta cagaaacttt tcatcaaaaa aaattatccc cttgtacaat 300
tccattgtat tataaaaaata atgtgctaag gtttgctttt aggatgttta caatgcttgt 360
tggtttgtac ggtgcaggac agaaactttg gctgtagtgc gcgattttta gttttatatg 420
gaacgtcaaa tggtt 435
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<210> 7706

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-030-Q1-E1-C1

<400> 7706

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ataattaata gttcatcaca caattgaagt ataaagcaaa aactctatta aaaaccaaca 180  
aactatgttc tcagtcaact ttgcaactac aattcatcat gttttcagga aggggtcgcat 240  
atcggagcct ttaggcaagt ccacatactc aaccatcata tagtcttcta tgattgctaa 300  
cactcacgcg gtacacatga gcaaaacatt tcaaccggac acatagaaag attggggcctt 360  
atagtttgcg ctcccagcgt attcacctca aggggtgatgt caacanttat tattcatgct 420  
atctatattc aactggacat atgtgcc 447

<210> 7707  
<211> 412  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-030-Q1-E1-C2  
<400> 7707

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aaattacgaa aacctgggaa atttgtatat caaacttttg ttaaaaaatt catatcaaaa 120  
gcacgtttct gagatTTTTT taaaattgtt ttaccgagcg caaaagtTTT tgtttttcag 180  
caagatcaaa tcaactatca ccgtaagcca tccaacgggt cttacttggt tcaaacacaa 240  
attaaaacac caaaacacaa ttactactgt tggcaatcta ngaacngtgg tcncaacacc 300  
tgctgcttg cgccccgagg cgtggctcct ccggcgggcc tgtacgaccc atcttcacca 360  
gcaaacattc aagaccctcg cgagggggcca agcctcacga ggcaaacgtc gc 412

<210> 7708  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-C5  
<400> 7708

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gtcggagcag gacaatagcg gatacttccg gtacgtcgcg ccgtgcacct tctacggctc 120  
 gcccctccca aaagaggaaa agggacagga gaagaagaag aagaagccgc ctcagttcat 180  
 gctggtgttc atgtgcgtcc cgggtgtctcc agggaaaagc agggatgatct gggcggttccc 240  
 gaggaacgtc ggcgtctggc tcgacaaggt cataccgcgg tggactacc acatcggcca 300  
 gaacgccatc ctggactcag acatctacct cctccacatc gaggagcgca acttcgccgc 360  
 ggcgggcatc gaaaactggc agaaagccgt gtaggtgccc acgtcgtcgg acaccatggt 420  
 gattgccttc aggaact 437

<210> 7709  
 <211> 237  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-C6  
 <400> 7709

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 ttcttactca aacggagctt acgaaatatt ctgttcaagt tttgttgtgt gtagttttca 180  
 tgtcatttgg gtagagaatt gatgtaattc attttaaaga atggattgag cctagcc 237

<210> 7710  
 <211> 285  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-C8  
 <400> 7710

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 gtgcaggaca cgagcacggt tcttctaggt attccctgt cctttattcg aagcaagtca 120  
 aattaggtaa taataacact gcaaatcttg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa acgtaaataa aaaaaataa aaaaaaaaaa attaaaaaaaa aaaaaaaaaa 240  
 caatgaaaaa aaaaaaaaaat aaaaagagat gtcacgatag ctacc 285

<210> 7711

<211> 455  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-D1  
 <400> 7711

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 gggaggcaac cctatTTTTat ttttgTtatt tacttttggc tcatgtttag taataaataa 180  
 ttcatatagc ctctggttag atgtggTTTT aagttttaat tagtgTTTTgt gccaaagtaga 240  
 acctttggga agacttgggt gaaagttaat gcgatcttgc tgtaaaaaaac agaaactttg 300  
 cgctcacgag attagatgta atTTTTTTta tagaagagtg atTTTtaagtt gattatTTTT 360  
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 acataagtat tcgagagtta cagattccta cagac 455

<210> 7712  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-D10  
 <400> 7712

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 tagccgccac tcctagaggg aggagaaaac gagagaggcg aatgaggaga cgaggacagg 120  
 aataggatct atggttcgat gcattttcac ctcttttgtc tattcctata cgacacagta 180  
 aaaatccagg tggcatagcc catcggccgc tctttacgcy tgccttattg ttatggattt 240  
 ttatctcata tgtaaagtta tatgctacac tccaatgaga caacaatttt atgggtctttc 300  
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 cagaatgaag caattaaaga 380

<210> 7713  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-D5

<400> 7713

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actatcggtt agtatcggtt gagcctaagt ttttgcttct tcacatgagt tgtgctatcc 180  
ttgcaatgta gttttattta gctttgcttg ctgtttgaat aaagtatcaa gatcagaaat 240  
tattaaatga gagagagtct tcgcatagtt gcataattat ttagctactc attgatcctc 300  
acttatatct ttcagagtag tttgtcattt gctctagtgc atcacttata tcttttagag 360  
catggtggta gttttatttt gaagaaatag atgaactctc atatttcact tagattattt 420  
tgagagtcgt taata 435

<210> 7714

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-D8

<400> 7714

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agcgccggct ctgggcgtgg gatgacgtcc tgggggacct cccaccgctg atgatcggcg 180  
tcggtgatgc gcacgtggag ctggttgctc gtctctaggc tgcccccggt catatcaaaa 240  
ttaatacaat gagcatacga gttgtgtgca ttatgctggt tgtaatgggg agtatcatat 300  
actagtatca tgcatatgat actagtgtgt gatactacct tcgcaatgca tagtatcata 360  
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<210> 7715

<211> 361

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-E12

<400> 7715

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 gttgtacctg agaggccatt cctttcattg cctaggaatg attttaagtt ggtgcatttt 180  
 ggatgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacaacaaaa 360  
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<210> 7716  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-E5  
 <400> 7716

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 gttccacggc aaatgcgtgc ggataacccc ggccaaagcg gatcacataa agcactacag 180  
 gtgccctgaa tgcagcagct ccaagaaaat gaggcagtag gccgccgcct gcaagtctgc 240  
 ttcagccgtc tctgacccat ctgatcaaac tacaccatgt ttcttttctg cccaaggctcg 300  
 cggctagcgg atgtggattc ctctagaaac tgtgctccct cccatgtggt agtctcctag 360  
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<210> 7717  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-F12  
 <400> 7717

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 gttagttaca gattgctaca gacttttctg tttttgacag attctgtttt tcgtgtgttg 180

tttgcttatt ccaatgcac tatggctagt aaaatagttt ataaactata aggaagttgg 240  
aatacagtag gtttaacacc aaaataaata aagaatgagt tcattgcagt accttatgtg 300  
gtgggtttgt tttctttcac taacggagct tataagattt cctgttgagt tttatgttat 360  
gatgttttca agttttgggt 380

<210> 7718  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-F4  
<400> 7718

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ctgaagggtt acaaatcagg tctttgcaaa agatccaaac tccaggagat aataaaccaa 180  
ctccattttt catagatact gctccagcac agagaaaccc aactcccact gataataagc 240  
agatttcaat ggccaaagaa ctagtccgct ccagtccagc aaaagaatgt caactccatt 300  
ctaagaagcg tgtgcgtatc ctgcgcatcat gaaattttat accattctta tcatattttc 360  
tacatgtttc ttaccogtct ctctttttaga aaataagggt aaacgataca agacttcctc 420  
cattgggatc gtattcgagg aaa 443

<210> 7719  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-F7  
<400> 7719

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accctgttcc ggcaccctgc cggagggggg atccctcacc ggtggccatc ttcacatcc 120  
cggcgctctc catgacgagg agggagtagt tcaccctcgg ggctgagggt atgtaccagt 180  
agctacgtgt ttgatctctc tctcgtgttc ttgaggtggt acgatcttga tgtattgcga 240  
gctttgctat tatagttgga tcttatgatg tttctcccc tctactctct tgtaatggat 300

tgagttttac ctttgaagtt atcttatcgg attgagtcctt ttaaggatTTT gagaacactt 360  
gatgtatgtc ttgccgtgct tatctgtggt gccaatggga tatcacatga ttcacgtgat 420  
atatgttttg gtg 433

<210> 7720  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-F9  
<400> 7720

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ctgatgtgaa ggaggccgca ataagggcag aggaaaaggg aggggaggat aagctgaccg 180  
tcgaggaaga gaagaaggac ggcgaagaac aagaaccagc cgtcgtccg gtcgagtcac 240  
cgtctagttg aaattgagat gtgagatcgt gcatgccaac tcggatgtat tgggtgcgtgt 300  
atgaaccact gaatgtacag tttgctctct tcctttttct ttttcagcca aaaggatcct 360  
tccccaatgt aaaaagcttt gcgtt 385

<210> 7721  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-030-Q1-E1-G10  
<400> 7721

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gatacccaaa taacttatgg cgctcctcta ttattcggtat ttttctgacg ccgaattcaa 120  
tcatgcagtc tgccaaggc tcagcttggc gattcgtcga gcggctcctt ggattcgtcg 180  
gatgtgaata gtgcttcact tccgacggct tcctccctgc tccctgcgga cgacgccgag 240  
gtggagtccc aaaagggact aaaccaggag gaggttggtc tggagggtgcc gcaaggcatc 300  
ctcctggact ccaggcccaa agggggtaaa gcccagtggt gatctaagtc cggccctggg 360  
ccggacactg ctacagaacc atcaacgggtt 390



<210> 7722  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-G11

<400> 7722

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ggggagaaat ccttggtcgg cctgctgctg gccagatag cagtgcgct tccgctcgtc  120
tccatcatga tgtgatacgt ctccaacgta tctataattt ttgattgctc catgctatat  180
tatctactat tttggacatt attgggcttt attatccact tttatattat ttttgggact  240
aacctattaa caggaggccc agcccagaat tgctatTTTT ttgcctgttt tacgggttcg  300
aagaaaagaa atatcaaacg gagtccaaac ggaatgaaac cttcgggaac gtgattttct  360
caacgaataa gaccgggag acttgaacc tacgttaaga aaga                        404
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<210> 7723  
 <211> 352  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-G12

<400> 7723

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tcggcaggat ggaggtgctc accggcgcca actgggagat caggatattc tgcaccgcgt  120
acgttgacta atggagccgg cggttggtcg atgtgagttg gtgcgcgtgc ctccatcgat  180
cgtcatgtgg acggggtcac gacggccggt gtgcccgcca gccgcacgc acttgcat  240
ttctatgggt ggtagagaa ttgacaccgt cacaccgcca cgcagcgagt cttccggtgt  300
atgtaaaaaa aagtcgtctc tttgttcttg accgagtgcc cattgagatt tg          352
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<210> 7724  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H11

<400> 7724

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gtatgaaccc taggccttat ttccacgcat tgcaataccg tttacgctca cttttattat 120  
tagttacctt gctgttttta taatttcaga ttacaaatac ctttatccac tatccatata 180  
ccacttgttt taccatctct tcgcogaact agtgcactta tacaatttac cattgtatcg 240  
gggtgtgttg ggacacaaga gactctttgt tatttggttg cagggttgct tgagagagac 300  
catcttcac ctagcctcc tacggattga taaaccttag gtcatccact tgagggaaat 360  
ttgctactgc cctacaaacc tctgcaattg g 391

<210> 7725

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H12

<400> 7725

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tgagagctg ggcggcggg cggtggccaa actcggagtt cgtcgctcgg cagtaccacc 180  
ccttctcggg caagttcagc ctcaacatgt tccggtggt gtggaggacg gcgttcgtga 240  
tcgtgagcac ggtgctggcc atctcgctgc cattcttcaa cgacatcctc ggctgctcg 300  
gcgcgctcgg cttctggcgg ctacacgtct acttccccgt ggagatgtac atctcgaga 360  
gcaagatgaa gaagtactcc agga 384

<210> 7726

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-030-Q1-E1-H2

<400> 7726

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ggggcgcagg cctcactagt ggactcaact aaggtaatcg atgggcaaca gctcttgtgc 120

aagctagcca tcgaggggaa gaaggggaag cagcaaccac aacaatctgg gcctgccggg 180  
 caacagcaac catagatgct ccaggggtggc ccgccggaca tgacgggttc tgggcttggg 240  
 ctaggtggag cgcagatggg tgggcaatat ggtggccctg ggaatggtat gccatcgttc 300  
 ggcgcatttg gtggtcccaa cccatatgcg aacatgccat cgtccatgag tggcgggtgg 360  
 ggagctgggt tgggctcaat gggaaatcag atgcattccc ggaatgggtt ctgctggggc 420  
 tgggtgcattt ggcaccggcg ggctg 445

<210> 7727  
 <211> 368  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-030-Q1-E1-H4

<400> 7727  
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 ttgtcgtcga agcaggcttt atctgatttg gctgttttcc gccagtatta tcaggaaaca 120  
 ttaaatacca agtataatcg ctcaggagta gacaattott ggtttgtgtt tggagggtcg 180  
 tactctggag ctctcagtgc ttggttcaga ttgaaatttc ctacttaac atgtggaagt 240  
 cttgcaagtt caggggttgt tcttgctgtt tacaacttta ctgacttcga caaacagatt 300  
 ggggagtcag ctggtccaga atgcaaagaa gcaattcaag aagtaacaaag gcttgttgat 360  
 ggacaact 368

<210> 7728  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-A10

<400> 7728  
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 actacagcag cagggcttcg cctaaactcc gctacagtat tatcgaggaa tatggtggca 120  
 gggggcaccg cacacggcta aggaatcgat cacgaggatc aacttgtgtc aacttgtgtg 180  
 tttagaggtg cccctgcctc cgtatataaa ggagtagagg gggggaggct ggccggccat 240

agagggaggc gcaggagagt cctactccct ctgggagtag gattcctccc cccaatccta 300  
 gtccaactag gattcctcgg aggggaaggg agagaggggg gccggccacc ttctcctagt 360  
 cctaatagga ctangggaag gggaagangc gcagctacct ttgggctgcc 410

<210> 7729

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-A11

<400> 7729

gcccgggccg acgggcgggg ctgtcttgaa gagttgtatg cagcttcgcc atacacctcc 60  
 ttcatcaaca acgacatcct ggacatctgt gcgagacaga aaaaattaag acttgaaaat 120  
 acgttaaagc acaccacgca cgtggaatga aaaaaaggaa aaaaaagtga aacacagacc 180  
 acatacaatt tcgacacgtt ctccatggag tcggttcctt gaaagggttac gccctgtata 240  
 tctccacgag tcatggatat ccagggactc acgatacttg ttcatagtgt acagtgtgaa 300  
 atgattccga ttccaatatg gtagcatgat ctatcaacat gtgaattaga cgacaaagaa 360  
 gagcataaga agttagctac aagatgtctc agcagtttag aagacaacac tac 413

<210> 7730

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-A2

<400> 7730

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 tgctgaagca acaattggaa cagtatgaga ataaatgggtc agaatatgag actaagatga 120  
 aagttatgga agaggcatgg aagaaacagc tctcttctct gcagttgagt cttgtggctg 180  
 ctaagaagag cctagctgct gatgacatgg tcacccgagc agctcggact gataccactc 240  
 caacacatgc tcaatacgac tctgaagata caatgtccac agggacccat accccagaag 300  
 ggacagagtt gaaataccaa aaccacaacc ctgaacctag agtggtgaca ggaaactcag 360  
 ataggcgaat aaatgctgtg aatc 384

<210> 7731  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-A4  
  
 <400> 7731

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 aggaataata aaagtaagaa aattagacaa gtatcaatcg caagtaagaa tttttttcct 120  
 ttcagaaaga agataagaac aagaggctca ccacgggtgg gccggcaacg aaatcggcgc 180  
 gggcgatcga cggcgggtgaa gacggggacg agacgtgacg gaccgctaaa cctagaaaaa 240  
 tctcggcgaa aatggagctc ggaggctcgag tttcgagaga agaaatatta actactgtgg 300  
 ctccgacatt tcacgaaca cctcatgtgc atangagggtg agctagagca cccaaatgcc 360  
 ctcccctcgc cggccagcaa aaaacagagc agtgtggagt gctttgctcg ctgac 415

<210> 7732  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-A6  
  
 <400> 7732

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 cctaccaatc tatcccccta ggagcatgcy cgtagtactt tgtttcgatg actaatagat 120  
 ttttgcaata agtatgtgag ttctctatga ctaatgttga gtccatggat tatacgcact 180  
 ctacccttc catcattgct agcctcttcg gtaccgtgca ttgccctttc tcacattgag 240  
 agttggtgca aacttcgcgc gtgcatccaa acctcgtgat atgatacgcct ctgtcacaca 300  
 taagcctcat tatatcttcc tcaaaacagc caccatacct acctatcatg gcatttccat 360  
 agccattccg agatatattg ccattgcaact tccatcatca tcatatacat gacttgag 418

<210> 7733  
 <211> 354  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-A7

<400>       7733

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tcgccgcatt tgacgtgcag tacatcatcg acgagtgatg tcaccgttga tctgtatgaa  120
taatttgtgt caaataaaag gggggaagtg actagtgaag taaaacgacc tgtaacttgt  180
taccctattc ttttgcaa atgtcatgcta atcatgccat aaacacgaac tgttcgcttc  240
atcaccaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaca  300
aaagataaaa agataaaata aacatgcata aaaaatcaaa aaacttctaa agtg       354
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<210>       7734

<211>       399

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-A8

<400>       7734

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attcgcggtg cgacactgtt atggaaaaat gtggtactag ggtggtgggt tgggatcatg   60
agggtctctt ccaagcagca aggtgtgcta agtatgatgg tattacagat ccacttaaca  120
tagaaatcct agcctgccga gatggaatgc ttctagcgaa agatttctta gggctaccaa  180
tctgttatca ctgagacaga ttgttctgat gccaaagtacc tgtgggaaat gaggaaggaa  240
ggacggtcac taggtgtgcg tattcttaag gaaatgcaag acagggtatc taatttttag  300
ggttttgagc ttcggtatat tagccgtatt tgaaataatg tagcacattg ttgtgctaaa  360
gaagctctag gcataggtcc agttcttttg gccgattct       399
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<210>       7735

<211>       381

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-B1

<400>       7735

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catacaagga aaacaaattg gggctatttc aagcatgtcg aaatacaacg tgctctcaga   60
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tgaagccttt tagcctaccc gaacccctc cattaaacat gatgtatttt tgaacatctt 120  
 tgaaatgaaa ccaacttttg aaagtatgtg ggaacgcca tggttaagcat cgatgtcaag 180  
 tttggatgat ctccgacacc gstatgcaagt tgcgacacac ccgaccattt atcggtattt 240  
 tttgattgaa aaaactccag aaaatgaaaa acttgtcaag aaccaagaa agtaggcatg 300  
 gtgccctgag ttgatcatgc aataccatga aaaagaatta gggtcatttg aggaatgtca 360  
 gaaaaaaaaag tgctctcaaa c 381

<210> 7736  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-B2

<400> 7736

ggtcgacggg ccatacaaag tcatcaagaa ctggaactac accggcctcg tcgatgccat 60  
 ccacaacggc gagggcaact gctggaccgc caaggtgaca tgcgaggagg agctgatggc 120  
 ggccattgcy acggcgaccg aggagaagaa ggactgcctg tgcttcatcg aggtggtggc 180  
 gcacaaggac gacaccagca aggagctcct cgagtgggga tccaggggtct ctgccgcaa 240  
 ctctaggcca cccaaccgc agtagacatt atactagatc tcgattttga tgatttgagc 300  
 gaggcatttt cgatttacta gaatccagcg tacgtttgat tactactccc ttcgttccta 360  
 aatacggatg tatgtagaca tgtttctaga cattttgaat gactactaca t 411

<210> 7737  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-B3

<400> 7737

gcatcctaata gactcaccga caatctgtaa cctgtattca tctattgcgt gatgcattct 60  
 attggataca agtcatgggtg ttctgcagtc tgcatttctt cacttagtct ggatttcgag 120  
 agctgttgca tgcattgtgc ctgcgcagta ggctcatctt ttacagtctg tgggctgtga 180  
 actggtaact aggaggttca atgtcagtc attttattga cactgctatt taatttttga 240

gagggatattc attgttcagc atgaattttg ctgtagtcgc acttgtatctt cctagagcat 300  
gtaacagtcg tcacggccgc agatattgaa atcgatgaag ctacattcta tgtaaataca 360  
tatatatata tatatatattt tcccgtaaaa aaaataccct tgaaggaaaa ttta 414

<210> 7738  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-B7  
<400> 7738

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ggtgaaacaa ctgatgggtg tttattagta atatttcagc acgattctgg ccctgtaggg 180  
tcacattctt ttgaatctgc acgtcacttg tttattgtta ctactgctgg ataggctgtt 240  
gccagcctgc ttcgtcaacc gaaggatcgg cataatggca gtcttctctt tgatatccag 300  
tggagactag ttcatagtga tttccgattt attttgagga tttcccctga aggtaacatg 360  
gggtttgaga gtgcacattt caatcgaagc catgaaatga ctcaatt 407

<210> 7739  
<211> 408  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-B9  
<400> 7739

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gcacagcagc aacacagctt cctctagcga aaagaccaag aagaaaagaa acgttacagg 120  
taatgacggc acggagcaat cgtggtagac cgggtcccag atgaaacaaa ctagatgtaa 180  
actatacttt tatcatgaag attgctgcag tatattctct ccctctctct tttctggtgg 240  
ggcaactaga tacgaagacg acccgttcac aagcaagttc aaaggcaaag aaggatatca 300  
taatagttga ccaaagggtg tagcgactcc ggatgtacag tgtgagtgtt ttgctgatgt 360  
aatttgtgta agcctgtgtt gtataaccga ggaacggaaa ggggcaat 408



<210> 7740  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-C1  
  
 <400> 7740

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aatactcgga gtagaaatca aatgggtgaa acaactgatg gtggtttatt agaaatattt  180
cagcaagatt atggccctgt agggtcacct tcttttgaag ctgcacgtca aatgtttatt  240
gttagtagtg ctggatatgc tgttgccagc ctgcttcttc aaccgaagga tcggcataat  300
ggcaatcttc tctttgatag ccaggggaga ctagttcata ttgatttcgg atttattttg  360
gagatttccc ctggaggtaa catgggggtt gagagtgcac atttcaagct aagccatgag  420
atgact                                                                    426
  
```

<210> 7741  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-C3  
  
 <400> 7741

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gggtcgaccg ggagctacat ccggtacatg gggtcgctca ccacgccgcc ctgcacggag   60
aaggtgatgt ggaacattct gggcaagggc agggagctga gccaggagca gttacaactc  120
atcacgcgc cgctgcctca ccaggacaac aggccgccgc agccgctcaa tggccgcaa  180
gtcgccttct acaacccgcc aaacaccatc atctccatcc aatccctagt actccctccc  240
taaactaata taaaagctta catttgttta cagagggagt acaataagca agacatagta  300
catactccct cctcggttcc acaatataag aacgtttttg acactataca tgtcaaaatg  360
agtaaacatc taccagaaaa aaaatcagga gg                                                                    392
  
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<210> 7742  
 <211> 390  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-C4

<400>       7742

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aagttgcgct tgaagagatt gtcgtcacga caccagagca atgatgatgg gtcggcttct   120
tcaggctgtg gtcaacggac catgcaagga tagaattctt gcgcaatggc ttcattcttg   180
ttcttggggg gaaggcctcg atagagaata tcacccaag ggctcttgat aggatttttc   240
tctgcgtagc cctgggtcac acacttgtag ttgtatcact gttcagccca atagcgtagc   300
atccattgga ttcgagtctt gcgctaattg taatcctctt caggatctgt tttgtacatt   360
tctgcaagat catcatgtag atcctttgaa                                     390
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<210>       7743

<211>       398

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-C5

<400>       7743

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agagaaggaa cagcagcaag aagctccagc gccagctttc cttgcactat taattttagt   120
tgcctaattc gttcatcatt catccatcat tttgctgctg aagtgtatta attcttggtt   180
ctgcttacta gattccacct tatgcgctag ctgttgggcg aagtacgtca atcacctcaa   240
aatttagtag atttgaaata tcgttttcat tagccattag tctctatggt gaaagagttt   300
ctggtgaaga aatagctagc taggcctaca acttttccca tgtctttttg tttgatgtct   360
ggatgttatt ggaaacctta agtttctggt gaagaaat                                     398
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<210>       7744

<211>       369

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-C6

<400>       7744

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aatgcgctgc tcaagtgtcc aagctcttag atcagcctac cacattcgac ttaacgctct 180  
acctgttggc acagctacgt caaacaccac aaaatttagg tcaattgaca tgacgtttct 240  
cagcatacac tagtcgtcaa gtcttgtgag ttctgcatta ttcagcatcc aaccatgcat 300  
acaactttac tcaagtcttg ctgtatgatg tatccacttc atgatcagcc ttgtctattt 360  
cttcaagat 369

<210> 7745  
<211> 325  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-C7  
<400> 7745

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ttaaggtcat gatggccaag tgatcccgcc gatgtcccg tggacggtgg tattattatt 120  
ttaccgggga ggaggaaatt gtgctatgca tattagtagt aaggaatgcg gctctcgttt 180  
ccttgtcttt gccccaaacc agaagaagcg tactattaga cgtagtgtgct gaagagcatt 240  
catggaatcc tcttccccctg ctgctacctt gtctctctcc cgtgtgtcat tgaaacatct 300  
ttctttctgt gtgaaaaaaaa ataac 325

<210> 7746  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-C9  
<400> 7746

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tatectttgt gggaacttca ttcaggacat gacataatgt caatatagcc tccccccacc 120  
atgtcttggga taaacccgat gtatctaaca tgggtgtaac caaatctgct agagtatggt 180  
ttttccgttt ggcaaccccg tttgactggg tgaataggga ggcgtcctct catgaataat 240

accatgttcc acactgaata aatcaaactc attagaaaag tactctccac cacgatcaga 300  
 ccaaactcgt ttaattttct tttcaagttg gttctcaact tctgccttat agattttaaa 360  
 gtagtgtaga tcctcatcct tagtatttaa caaatacaca tagcagaatc tagtggaatc 420  
 attaataaac aac 433

<210> 7747  
 <211> 350  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-D1  
 <400> 7747

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 ttaccgggga ggaggaaatt gtgctatgca tattagtagt aatgaatgcg gctctcgttt 180  
 ccatgtcctt gcccacaaacc agacgacgcg tactagtaca cgtagttgct gaagagcatt 240  
 catggaatcc tcctcacctg ctgctacctt gtctctctca cgtgtgtcat tgaatcatca 300  
 ttcattctgt gtgaaataca gtgagacgcc agaagacgcg cacggaacga 350

<210> 7748  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-D4  
 <400> 7748

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 aacaacaaaa aaattccggt gcccataac caccaaacct aaggcaggat ccggtgataa 120  
 taacatctgg acagacttac aaaagagaat atattgagaa atgggttcatt gagggataca 180  
 acacttgctc caagacacag aaaaagctag aaaactttgc gatgattcca aatacttgca 240  
 tgagggatct catttgcaat tgggtgcagag agcatgggtt cacaatctca gatttccttc 300  
 caagcaaaga ttctacagt tacttgccag agcaattgca tggtcactca atgtcaagtt 360  
 tgcacaatgt ttcagtgcct ctaattgctg ggaatgccag aaattttgtg attgaccaca 420

gcagttcatc tgtcgcgttt tc

442

<210> 7749  
<211> 402  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-031-Q1-E1-D5  
  
<400> 7749

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gaggagaggc tgggaaagct tggctatctc gttggaagcc agctaggcag ctgggttggg 120  
ggaagaatcg gactgatggt ctatgatgtc atcaacgggt tgaactacat gcttgagttt 180  
gtccgtccag aggagtatcg atcatcatct tacgcaacat aagagggctc agagtatgca 240  
gataactaca gaagttcgcc ttacgtatca gaagagggtc cagagtatgc acataactac 300  
agaagtcgcg aaggatatga gccaacatac agtgagacgc cagaagaggc gcacggaacg 360  
acggggtgaa gctgtatgtg aacaacctgc gaagcgcaca ca 402

<210> 7750  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-031-Q1-E1-D6  
  
<400> 7750

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attaccacca tgcccgttga gctgatgttt gtttcagcta gagaaatcgt tacgcccgt 120  
cataattcct ttttcgacgc tctggagaat aataactact ggtatatcat tctatatcaa 180  
agccggcttg tgaaataaat gatccgccgt cttgccttca aaaaaaaaaa aaataaaaaa 240  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa 300  
aaaaaggcaa aaaaaaaaaa tacgggcttg ccataagggt ttcaagggtta atttacactt 360  
cttcgaaagt tcaaacttct tctaaatggc cgccaatttt taatta 406

<210> 7751  
<211> 402  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-D7

<400>       7751

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gttagagcta atcttgatat ttgtattagc atgtttgagt tttgcatgta gtctagtcta  120
gtgtgggtgtt cgtccgacga aggcttcagg tgagcgcgcc aaggagggtga gatgccagga  180
tgccgtgtga ggcggcgagc acggcgagat gccgatgggtg ctgcgtgaga agcggcaaga  240
cgtatcagag gctggagccg tgatggactg catcaaattg ggtcgggtga accggccggt   300
cgttctgttt gttggactag ctgttcatgc gtgagttcgt ttagtcctag ccgagagtat   360
cgttgctagt agttgatgca tgcatgtagt tggcctggtc ac                        402
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<210>       7752

<211>       398

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-D9

<400>       7752

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tgattcaaga cccgtcgtcc agagcatggt gaatagggtt ctacaagggt tcaaactatc  120
tacctcgtca ttcacactgg gtgatcacia taacagagta atagatacta actctgacac  180
aggggaagct aatattcaca atggtccttc tagtaatgat acaatggcac ctacatcttt  240
gcacatgtac aatctccaac atacggagga ccgattctct ctacatattt aaatcatgcc  300
agacctccta atattgtcat aaataaagat tttgattcct gagtgtatct cttcaagcgt  360
catttaaadc atgtgaacaa taaacttttg agaatcat                        398
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<210>       7753

<211>       380

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-031-Q1-E1-E1

<400>       7753

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 cgttcgcatg tccgccccga tgatggtact gacgccgata ccgacaccga cagcgcccg 120  
 accgatggcg gcgccgatac cagtggggaa ggtagcatca tggaagatac cggctccgat 180  
 gccggtaccg gtaagatgca taagatgcag aggatataac agcctgacat actacggatt 240  
 ggaccacttg tgatcaccat catggcacct ggcatgtttc agacttgcat gtagctcgat 300  
 tttctagatg atcacgcgat acttctttgt gtcggatgat gatttatact agactatatg 360  
 tatgtcaatc ctatgattac 380

<210> 7754  
 <211> 306  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-E10  
 <400> 7754

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 catgctggact tcgagaccac ccataagccg gagcacacgg tccggagcag gctgccggcg 120  
 accgagccct gacgatggca ccttccgctc cagcattcgc cagatcttgt acagcgaaaa 180  
 tacacgcctg aagctgcagt gttcttgttg tttttctctt gcgctgacct cgaaaaacac 240  
 agcgacagag ccattctagaa gatggatgac tctgtggaat aatacaggat tcgccatttt 300  
 tatggg 306

<210> 7755  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-E11  
 <400> 7755

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 gagtacggtc gtatccaaca gagacgtaca tcataactat ctacatatcc atcagtatca 120  
 actaaggggt ggtggaatth aacagcaaca tgccagcttt gactcagtgg ctaacatgat 180  
 ctagacggca cgtaactctt ttgaggtggc gcacacgagt ccacatattc accatatcaa 240

tacaccacta tggatccgct cccgtctccc tacgataacg ccatccagag cactcacgct 300  
 tatcttgccg attttacaat atccacttca agttatctat gaactgtaca tgcaaccag 360  
 atgtccttta ctgcggacgc ggctaatacc 389

<210> 7756  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-E12  
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 catgatcatg tagttgacat cgtattttgtg gcagggccac cttcataatt ttcatacatg 180  
 tgcgtcttga ttcattgcat atcccggtag accgccggag gcattcatat agagtcatat 240  
 cttgtttctag ctttgagttg taaatcaata aaagtgtgtt gatcttcatt attagagcat 300  
 tgtctcagtg aggaaaggat gatgaggact atgattcgcc cacaagtcgg gatgagactt 360  
 cggactttac aaaanaaaga gagaaaggcc aaaaaaaaaa aanaaaaaaaaa aaaaaaaaaag 420  
 cggccgc 427

<210> 7757  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-E3  
 <400> 7757

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 cttgtactac tccatgactt tcctgaattt ctgtgtgatt atcacttcag tttttgtgac 180  
 gtgatccctt ccagttgcat tcaaatgcgc aatgtcattc ttagtgcttt tccgcgcaac 240  
 atgagacttc cagaccatc tactcctaac ttgaagattg atctgctagc tgaaatttca 300  
 ttacctccac gaatcatgtc agatgtcgat ggtgccctca agttaagca tatgaagggt 360



gatgtcgatg agtatcttaa gagaccagaa ggctcatcct ttttgaatga tctgaagcaa 420  
aaattgctgc tgcct 435

<210> 7758  
<211> 429  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-031-Q1-E1-E4  
  
<400> 7758

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ggaaaagggc catgtacgac gccgggctct ttgatccctt cgacgacgac gaccaggatt 120  
tctcggactt catgcaggag atgctgggtga tgatggatag cgtgaaaaac gagaagccgg 180  
acacgctcga agacctgcag aagatgctgg atgacatagt caacggcgac ggcggtagcc 240  
gcgccactgc tgggtgctgg gtagcggcg gcgggtgggtg tggctgcggt ggctcgcgttc 300  
caccggaggc caaccgcaga actcgtgtcg ccccttacct gcagccttcg cgaaggtgat 360  
ggacgcgccg gtgctcgtga cgtgcacgca ncgctgcgct tgtangagag agatcagagc 420  
aagaagaga 429

<210> 7759  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-031-Q1-E1-E5  
  
<400> 7759

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aagggatgta tgaccattcc aaggaagtgg ccgaggccat gctcggggaa gctaattgtga 120  
aggtggctcc ccggagcatg ggtgggtgagg acttcgcttt ctacgcgcag agagcggcgg 180  
gtgcattctt cttcatcggc gtaggtaacg agaccgccat ggatagtgtg catccggtgc 240  
actccccgca tttcgtctc gatgaggggtg ttcttctat tggagccgcg tttcacaccg 300  
cggttgccat tgagtacctg aaccgctcct ggaaactaca ggagcatgag tgaaggtccg 360

ttcttggtatt atggagtgaa aatcctctga tgtccgtata gtattagata tccagaatcg 420  
tcttcatttg 430

<210> 7760  
<211> 345  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-031-Q1-E1-F11  
  
<400> 7760

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gagactgcgt cgtctatctg ctaacttcat ctccgttcaa tggccgtcca cttacagtcg 120  
tgggacagcc aaggacagtc acctgacgct ggtggctcac catctgacac cgccgccggt 180  
cctgacgtgc ccggacaaga acttgatcca ccagggttggt ttctccaact acttgaaccc 240  
gctggggatc tgctgcaact acaccgttgg caaatgccac acgccaagg ccatcgagat 300  
tgtgcacaac gtgtgctga cgaatacgag ctgctgctg gccgt 345

<210> 7761  
<211> 443  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-031-Q1-E1-F2  
  
<400> 7761

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tcgatggtat ggcgaaagaa aagtaggcat actgtatata ccagctgttg tgttacttc 180  
actggtccta gggggcatgt gatgtaaatt atttctagcg tatgttctcg aaaggaaaaa 240  
agggaaattc cgggtgcctc tagacgggca ttgagatgca tatgctgtac tgtgaccgag 300  
agtagccgat tcagagagat accattttgt gatgaaaaat aacttgcgta aatcggtgga 360  
tttgtggatg taacaaaaaa acacgaaaat tgcaaaggcg cgtaagtga tatccacca 420  
ctgtccagat acacagtta aaa 443

<210> 7762

<211> 316  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-F3  
  
 <400> 7762

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atcaactggg acgccaaggt gctgctggat catgoggacc gcatgctgat gctagccagg  120
ttggcctttg aaggctcagc tattgctgtc aaagtgtcag gcatatactg gtggtacaaa  180
actgccagcc atgctgctga tctgactgct tggttctaca acccatgtaa ccgcgacggg  240
tacgctccaa ttgccaagt actgaaaaac catggtgcgg ctttgaactt cacctgcggt  300
gaactgcgca ccatgg                                     316
  
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<210> 7763  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-031-Q1-E1-F4  
  
 <400> 7763

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ctatttgctg gtctttatct gtattttggg caaagctttg tacacgacgg gagcaagaaa  180
ccagtcgctc caccaccata cattgacca tatgagctac tggaagatga taggatctcc  240
cgccctccc ttgatgtgtt ctgaatctcc acgacaaaag gatagtattt gtagatagct  300
caataatfff cttgttttac tatatatgta cctgtaaatg caatagctgt agactgttat  360
tatccggaat ttggcaatgg ctcgtaggtt catattcacc ca                               402
  
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<210> 7764  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
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 <400> 7764

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gtcctctgat tattgtcacg gtttctctat ttgctggctt ttatctgtat ttggggcaaa 180  
gctttgtaca cgacgggagc aagaaaccag tcgcgccacc accatacatt gacccatatg 240  
agctactgga agatgatagg atctcccgcc cctcccttga tgtgttctga atctccacga 300  
caaaaggata gtatttgtag atagctcaat aattttcttg ttttactaga tatgtacctg 360  
taaagtcaat agctgtagac tggtattatc cggaaattgg caatggctcg taggtgcata 420  
tgcnaccatt gtctanatac acat 444

<210> 7765  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-031-Q1-E1-F8  
<400> 7765

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caccggaag ccatagtcca ttgtggtgaa gcgtcatggt gtcgttgagg gcctccaatt 120  
gagttgtgga gattgcccc aacctgcttg taaaggctcg gtcgccgcct ccaagggcac 180  
caatagtgga atcacggcat ctgcattgt gtgagggcgt gaggagatta cggtggccgt 240  
agtggcttct tggggagcat tgtgcctcga caccgctcca acggagacgt acttcatctc 300  
agagggaaatg aacttcgga acacatctc atctccaacg cctccactct tggttgtcac 360  
gtgcctttag ttgtggcagc gtagttgttt caga 394

<210> 7766  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-031-Q1-E1-G1  
<400> 7766

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agttatttta gataatacta aannacagga tagagtaaga tacaaaaagt ggtaaaagaa 120  
aagtgggatt tcatcaagat tgattacaat gaagtcccct aaatttcgga aatcaaagag 180  
atttggttgt gggaattggt caatgagtta agtaataata ataagaacta gatcatccaa 240  
accattgaa tgaaaaaatg aaattcgatt ttcaaggaaa tttttggata agagattaat 300  
aaacaattga attgaaaaaa aaaaacttca ttctaatttg gataatttcc ttttcaataa 360  
gaccctcttt ttggagtga cgcgcgaata ttcccc 396

<210> 7767  
<211> 351  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-G10

<400> 7767

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atcgccacgg cagcatggac ggcgaccacc acgagaatag tgacaacact acacactacg 180  
acacgatgca cggctagggc cacaaggacg accacggcca ctgcagcagc atcagcgaca 240  
gcgacagcga ctgagccatc tccggccgcg ctccggcagc atcgtgcagt gtacgctaga 300  
tcgatgaacg cttgcgagat gtgtgccatt catatatgtt gcatggtttg g 351

<210> 7768  
<211> 379  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-G12

<400> 7768

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aagataaaaa aaaaaaataa acaaaaaaac aaaaaacaca aaacggtcaa aagcgatacc 120  
taaaacttaa ttcaacggcc gttcgtcttc cagggtctcc cctgggttca acttcgtcgt 180  
ccgtcgtttt aatcgccttg caccgggtca ccctttccct agcccgctc tgccccgctg 240  
cgccctttcc ctttttctc cgctgacgtc tctccgact gggcccccac ctggtccccc 300

ttccgatccg ttttttacct tgccgggggt gtggaacact ccccgtaacc tgtccgtttc 360  
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<210> 7769  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-G2  
 <400> 7769

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 ggctattacc tgggaatacg atcctctgtt catcgctggt tccgacgaca actagagtct 180  
 cagggggtac tatctacaca gggcacacct agcatgtgca ggactatcat acattatattt 240  
 acgtacctca aagcctgtca gtagactcat aaaagcttca tgcaatctgc tttcgacgga 300  
 cgagattctc tccatcacct tattcatcag cacacgggtg tcatctgaga tggccgctcg 360  
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 gctctct 427

<210> 7770  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-G4  
 <400> 7770

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 aactgttcga tcgatggcag agtttcgtcc gctattctaa attgctaaat gcacacaggt 180  
 ggggcctgag ttttatgtgg acggttagat gcctaattctt ggggtttag tttgtcttgc 240  
 ttttcccggtg tacgtttatt tgggtgggca tagtgaagaa tatgtttgat tgtttaatag 300  
 tataagtaga gaagtagaga tttgtctttc acctggagat tcgatgtagc tcggtctgag 360  
 catgagtgat agcagtcttg tatcttatgt ttaccatgca aattttac 408

<210> 7771  
 <211> 260  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-G6

<400> 7771

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 gtacctatag tccacgaaaa agcgaacggc tacggttagt tcacccctagc cgaaccaatc 180  
 tgagcctttg cataagcctt tctgaatatg cggttgcacc atcgtgtcga gttgctcgtc 240  
 ctagcgtcga gtcctttcaa 260

<210> 7772  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 7772

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 gatcctaggt acgggccgac agtccgacac cgacctacga cgtgcgatcc aggaggacca 120  
 cgtcggccga tcaatcaatc agacgaatta ctaccacggt aataaggggt gcagtgggtg 180  
 gtgattaact cgcaccgcca tgggggctct gtcggtgacc gtgtgatggt ccaccatagc 240  
 ttccagaaga tttcaagaaa cgtctcgttc tagctactaa tttgacacgt atagatcttt 300  
 cgtgtatcag caccgatccg taaatggggc ttccagaaca catcgatcca ttttgctcgt 360  
 gccaaatgcg ggcaagtctc acgtccagaa gcaggaaaag tagagcgatt aagaaagcag 420  
 tcggaagcan atggcaattg gcaagcttac a 451

<210> 7773  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-H1

<400> 7773

caagaaagga ttcagtcaaa tatatcatca gtatcaatca ctatatgaca ccacacaaca 60  
gatatgctgc tgtcagcagt gctctctaaa tagacactgc aattatctta tacatcatta 120  
ctgttgtcag caatgctctc taaatagaca ctgcaattat catgtacatc attgctgctg 180  
caataaacca ctaagaatta ttcaatatct agcctagcgc cttcgttata atcaaccgag 240  
ggttgaggcg gagttacaaa atctgaatga gaaaccaagg gattgtccaa gtcagcgaca 300  
tctttgttat cttcagagct gttagaagca gctgagatgg cgtcaccgga ttctgaatgt 360  
gttctgtcca catatgcttc gggtaaggag ctctcggcca ca 402

<210> 7774

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-H12

<400> 7774

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atttgacgtg cagtacatca tcgacgagtg atgtcacctg tgactgtatg aataatttgt 120  
gtcaaataaa acgggggaag tgactactga actaaaacga cctgtaactt gttaccctat 180  
tcttttgcaa atgttcatgc taatcatgcc ataaacacga actgttcgct tcaaaaaaaaa 240  
aaaaaaaaaa aaaaataaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaagggg gacccccaaa agttacaaac ttaaaaaaaaa cggggccccc 360  
caaaaggttc caccctaaat tccccctcaa tgcaaa 396

<210> 7775

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-H3

<400> 7775

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gcgcattccc atgatcagat tccccagag gcatctcaaa gtcccatccc cagcagcggc 120



gcagcctgca gaccagcacg cgaccctcat gtcccgattg ggagctaaag tagaggcacc 180  
atcttctgga gagaaaaaga attaccgctt tagatcagat gtgccttccg caccttctca 240  
taatgctgtt ggagggccag cttcacagct tccaagcgc aaaccactat ctgaggaaga 300  
gattgaagct atcatgcaag gcggtgtctt ctgatattgc ttccggccag tggcaccttt 360  
tgtggagcac caataagccc tacgccgcgc tgcattcgta accgttttgc aca 413

<210> 7776  
<211> 449  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-031-Q1-E1-H4

<400> 7776

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aattagaatt tttgggtgga gagtagccac aaataccctg gccacaaaaa gcaacaaatt 180  
taagaggacg ctcgaggtgg actcgacttg tgacatttgt ggcaatggcg tggaggatga 240  
acatcatgcg gtgatcaatt gctcgaacag cagggccctt cgcgttgcca tgaggaagga 300  
gtggtctctt ccatcagaga aatccttcag acatacaggt anggactggc tacagggcgt 360  
tttggaagaa gaaacagagg aagtttagagc aaaaatctta atgctgctgt ggagatgttg 420  
gcacttgaga gaagatatcc taagacaca 449

<210> 7777  
<211> 440  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-031-Q1-E1-H5

<400> 7777

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tgaaataaac gaaataacgc tcttgttcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aacggaacac ccaaaagata aaataaaata aacaccaacg ataacaaaaa taaaacaaaa 300  
 aatcacctca aaaacaaaaa aaaatagacc aataataaaa aaccaacaat caagaaaaaa 360  
 acctagtaaa tcgaaaataa accttatcac aaacaaaaca cctattcaaa aactctgaaa 420  
 aacaaaaaag gcaatcaaaa 440

<210> 7778  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-H6  
 <400> 7778

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 acagatattt ttaccacaa ccataacatt aaagttgtct aacatgtaat caagacttca 120  
 agatatagct ccctttgcac caagagttca acaaaacagt ttgcaggcag gaaaagttaa 180  
 agctctagaa aaaatccttt atgaagttcc catgactaaa aagattcctc aatgaagttc 240  
 cattagcacc aagttataac ttttactgg ctaattaagg catgaatgat acccagcact 300  
 aaaaaatta cgacctetca aacaacaaca gaacagaaac tttatatgtc cattggccta 360  
 gagcaaggaa gaacctctat gaagttggtg gaaaaggtaa tgtaagttgg gtggaacata 420  
 gatcacatac ctgaatctaa tac 443

<210> 7779  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-H7  
 <400> 7779

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 atcacagata ttttttacca caaccataac attaaagttg tctaacatgt aatcaagact 120  
 tcaagatata gtcctctttg caccaagagt tcaacaaaac agtttgcagg caggaaaagt 180  
 taaagctcta gaaaaaatcc tttatgaagt tcccatgact aaaagattc ctcaatgaag 240

ttccattagc accaagttat aactttttcac tggctaatta aggcatgaat gatacccacg 300  
 actacaaaaa ttacgacctc tcaaacaaca acagaacaga aactttatat gtccattggc 360  
 ctagagcaag gaagaacctc tatgaagttg gtggaaaagg taatgtaagt tgggtgg 416

<210> 7780  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-031-Q1-E1-H8  
 <400> 7780

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 atttgcataa atgccatggt aaaatgattt atttcataac taattaacca taactccgaa 120  
 ttaaataaac tatatatgta aattgtctag aaaaatgcat agattaacat ggtgcacttt 180  
 gttttattgc ttaacaacat taaaatatgc tttagggaga acagtagcta attaaaatat 240  
 ggacatgagg attttctgga attggtgttt gttgttccgg cctcatttaa acttacctag 300  
 atatgttggt ttattatgct tcacctcttg ccatgtttaa caacatttaa tattgtttgg 360  
 tagcttgac gagattaaac taaatatgtc aatgtggtgt nttgtcaata tgcaacttgt 420  
 tgcattattga gct 433

<210> 7781  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-031-Q1-E1-H9  
 <400> 7781

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 tatcaagtgg tatcagattt ccagggtgct cggtgagatt ttagagtttt tcgtagttta 120  
 gatcagagtct gttcttcata cctacagtcc acgaaaaagc cacaaaataa aattaggggt 180  
 agttcatcat atccgaacca atctgagccg ttgcataatc tttttagggt tttgctttgt 240  
 tgaatttgcg gttgcatcgt cgtgtctagt tgctggtctt agagtctagt ctttttagagt 300  
 ttogagttct ggtcagaagt tgtcacgccg ccgccgcacc atcatcatcg cccctgccat 360

cgaccaccac cgctccgaaa ctgtatccat ataccatcac gaatccgtgt ccatatatca 420

<210> 7782

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-A10

<400> 7782

gggtcgacgc ggagatgtga atgaaggag gtcggtctga gttgcagaaa agcatgggac 60

tacgcaaccg atgacgaaca tttgcactga gagtgaagag cgagggccac gccccttgcg 120

aagatgccgc cgtgcatgta atctacaaag aagcctacat gatcaacgcg ctagtcacgc 180

atgcaataca gaatgtctat ttgaacgctt acagggttcac acatgcagct ttagttggca 240

cggaaggtag agacagtatc caggtaggta cgggtggactc agattgaaga actttggcgt 300

tcattgcagt gcctgaggac acagtagacg cgcttattac 340

<210> 7783

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-A11

<400> 7783

gacgggggac acaaacacac ttcatccccc aaaacggaat tgcaaacccc ctccaatttg 60

aaaataccat tgacaacagc aaactttata aacccttggg tgtcaaaacc aaccggcctt 120

ggtgtgtcaa aggttaccgg gacaccttaa ggaacattgc cggatcaacc cacatgctgc 180

atcaactatt tgtacctata caaatattca tcatgctcaa tctccctact ccttgtttag 240

tactgcctcc gtcccataat atagtgcata tagatttttt tgagaagtta aacatcacia 300

actttggcca agtttgtggg ggaaaaatat ttacatctag aatatcaaac atgtatcatt 360

agatccatcg taagatgtag ttccatattt t 391

<210> 7784

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-A2

<400> 7784

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gggcacaact aaggtggcta tcaagcgtgg caacccttg tctgagcagg gcatacatga 120  
gttccagact gaaattgaaa tgctgtcaaa gtcgccac cgccatcttg tgtcgctgat 180  
tggttactgc gaggacaaga atgagatgat cctgggtctat gaccacatgg cccatggaac 240  
tctgcgtgag cacctataca agaccagaa tgcgccgctt agctggaggc agcgtttga 300  
gatctgcatt ggtgcagccc gtgggctgca ctacctcac accggtgcaa agcacaccat 360  
taccaccgt gatgtgaaga ccacagacat cctcctggat gagaaatggg tcgccaagg 420  
t 421

<210> 7785

<211> 278

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-A3

<400> 7785

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gtactaacgt ttcgtttggc tagtgcatac cgatgccgac gtatgtcgtg tacaagggta 120  
aggttcccgg agtctacgat gactgggagg agtgtctgag acaggttcac cgattcagcg 180  
gtaacagtta caaagggtag accactaggg ccgaggccga atctagatac acccgctatc 240  
tagcgggaaa agggatggac ctttggggga aacgggtg 278

<210> 7786

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-A4

<400> 7786

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tatgagctcc gacgagggaa ggacatgtcg gtcgcctga gcgcccttta aatccgcgcg 120

gtccctctct ttggctttaa tcaggggctg attccccga tgagtcattg aggcaataat 180  
tctgcagggc caaagcggcg gcaggcatcc acaccgcacc gcactacctg gccctaccct 240  
acgtacatac tccagcacac cgacgtacta cgatgtaccc tacactacac agtacacaca 300  
ccctaaagac ggagatcccc catgatcatc atcattagtg ctgccatgat cctctttaat 360  
ctgccgtacg caccagatat aatactgtct cctcccagt cccagttcaa gcactcgttc 420  
tgctg 425

<210> 7787  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-032-Q1-E1-A5  
<400> 7787

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aagatgaaaa aggaggaaga gaagaggatg gccacactga attcctgcaa ggatgaagac 120  
agctcatgct catcggagtc cagcaacagt gagtgtgaag gggaagtcgt cggaatgagc 180  
cgctgtgcca ccatttctgc gcctcgaaca ccacctgcaa gcacagtttt ccccatcata 240  
gtgcctcaaa ttccagactc cgttgcactg gatgctcaga tcttttccgg gtctgcaaat 300  
gcaatgcagt gcactgccac cagccttgcg gttgtcgaaa aaccagtgt gaacagaatc 360  
aatgtctgca tgggcggcaa gtgcaagaag gcgggctcgc tcgctgtcct g 411

<210> 7788  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-032-Q1-E1-A7  
<400> 7788

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catcggggct gcctccgtgg gcgtagtcac caatgaggat gacagtatca tcgcggccga 180  
tgctccggcg atagagaacg accagatcga cacgttcgtg cctgctccgg cagccaatgc 240

caacgaggat gccggtgccca ctttctggc tgccccggtg gccggtgatg atggcagtgc 300  
ctccttcgtt gctgcgccgg cggccatgga ggacgaactt gtatccatct cgtccgctcc 360  
gttggccgag gacattgatg gtatcatcat gggggctgct ccggtcgctg acgatggatga 420  
tgttgc 426

<210> 7789  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-A9  
  
<400> 7789

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aagcggtcga ggaagcgcg atcaagctgc tggagctgag gcaggtgaac aaggtgaagg 120  
cgctcgctcg cgccttcgag accgtcatgg acgacaacca aagccccgcc accgccccga 180  
agccgcggtt caacctccac gctgaacta cgagtacatt ccaccagcat gaagctcgat 240  
cgcgctgacc tcttcttta tcccggtac tctttaatca cccatcaacc caatttgtcg 300  
tcgtcgaca cttatctata attacggtat cgcttatatt ttgcaaggag gaagatgatg 360  
gaagggttat catgatgtaa taataataat gatcatgg 398

<210> 7790  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-B1  
  
<400> 7790

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tggaatacag tagatttaac accaatacaa ataaagaatg agttaattac agtaccttga 120  
agtgggtgtt tgttttcttt cgctaacgga gctcacgaga ttttctgtta agttttgtgt 180  
tggaattttt caagttttgg gtaaagattc gatggactat ggaataagga gtggcaagag 240  
cctaagcttg gggattccca aggcacacca aggtaatat aaaggacaac caagagccta 300  
agcttgggga tgccccgat ggcacccct ctttcgtctt cgttcacgga taactttact 360

tggagctaatt attttattca ccacatgata tgtgttttgc tttgaccttg ttttaattta 420  
attaacc 427

<210> 7791  
<211> 360  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-B11  
  
<400> 7791

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aaaactgcaa agatttggtta aaaaggaaaa ggcctcctgt ttctcaaact gttcaactcg 120  
acaacttgaa aaacctaacc ctacatggtg tatctctaac agaatacccc ttcaaaaagg 180  
ttttaaacgg tttcccctta aatggggaaa accctctcaa aaggaagcca atatctttag 240  
atatgcaccc atggatactc tctgtacaga gaacgctgga aaattacgtc gcatccgang 300  
ccacaacaaa taagcttgcc agagatgcct tctgttcctg gcttcgcgct tacaccgccc 360

<210> 7792  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-B3  
  
<400> 7792

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ggatcaggga gaggatgaac gtgaggaag gcacctcta catgaggagc gccgtgcggc 180  
gcttcttcca tgccggcatg tcggccaaga ggatgggcct cgccgacgac gagcagatcg 240  
tcaagattac gcctccctt tacaccagca atgacctcct cccctgcaga ttaaagatga 300  
tagtccgtag agagcaacca tgcatacata cataggatga acattgatgt tggaattacc 360  
acaatttcta gtaccacaga tacaatac 388

<210> 7793



<211> 108  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-B4  
  
 <400> 7793

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<210> 7794  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-B6  
  
 <400> 7794

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 gggatgctgg cgttgttggc atttcgccac gtcagacgaa tgcacatacc tggaaattca 180  
 gggttcatta acaagggcgt tactcagccc ggtatatgtt gtaaagtccg aataccttat 240  
 ggagtgttcg gcgtcgcgag ttggccctta tatgcatcag ctccgaatca tgtctttggc 300  
 caatagttgg gttttcccg ctcccggtgt ttgctacctt acgttccgct ctatcggcta 360  
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<210> 7795  
 <211> 324  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-B7  
  
 <400> 7795

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 ggcgttgttg gcatttcgcc acgtcagacg aatgcacata cctgtaaatt cagggttcac 180  
 taacaagggc gttactcagc ccggtatatg ttgtaaagtc cgaatacctt acggagtgtt 240

cggcgtcacg agtttggcct tatatgcac agctccgaat catgtcgttg gtcaatactt 300  
 aggttttcac ggctctcgtg tctt 324

<210> 7796  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-032-Q1-E1-C1  
 <400> 7796

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 agaatggcga ggatgatgag gaagaacaag aggagcaaga gggaggagga ggtgacgacg 180  
 atgatgatga cgacgacaac gacgatgaca atgaggacga cgacgatgat gacgatgatg 240  
 tcgctgctga agacgatgga gatggagtag aagaggagga tgatgacgat gaggaggang 300  
 aggacgatga ggacttgctc cagccccga agaagaggaa gaagtgaagc ccttcgaagc 360  
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<210> 7797  
 <211> 310  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-C11  
 <400> 7797

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 ttttacacca aggtgtttta ggaatgccac tcctatgacc aagatgggaa ttcctttgag 180  
 ctttctctgg taacttcaa gtgcattgga gcttatgtga agagcaagaa gaaccagaat 240  
 catgatgtt ggctatggga gaacgtcaag tgcacagaag acaaatgcct tcagagattc 300  
 ctggacaatg 310

<210> 7798  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-C6  
  
 <400> 7798

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 taaccgtgtt cttcaaatca gtgatggaac ggggggcaag aaaaaagtgg ttataacttg 180  
 aactggttgg gcagggtcaa gtttcttgag aaatatcgac acttctttgt atgatgtcca 240  
 tgtggtatca cctcgcaact attttatgtt cactcctctg ttgccgagtg tgacatgtgg 300  
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<210> 7799  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-C7  
  
 <400> 7799

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 gttacagaag tattcgagag ttacaaatta ctacagacta ttctgttttt gacatattct 240  
 gttttctatg tgttgtttgc ttattttgat gaatccgtga gtagtatcgg agggtagtaa 300  
 ccatagagaa gttggaatac agtagatatt acaccaatat agaaaataaa tgagttcaca 360  
 acagtaccaa aagtggtagt ttatttttctt atactaacgg agcttacgag ttttctattg 420  
 agttttgtgt tgtga 435

<210> 7800  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-C9

<400> 7800

ggctcgaggcg attcttcatg atgatctctt tgcgtttcaa ttcttatctt ttatgtgagc 60  
atcattgaaa tcatcatgcc tagctagggg cgtaaaccgt tagcgcttgt tgggaggcaa 120  
cccaatttta tttttgttcc ttgctttttg ttctgtttaa gtaataaata aatcatctag 180  
cctctgggta gatgtgggtt tatgttttaa ttagtggttg tgccaagtaa gacctacagg 240  
atcttcttgg atgataatta tttgatcttg ctgaaaaaga cagaaacttt ctgctcacgt 300  
aaacaattgt taaaaatcac cagaaagcga taaaatactg attccaattg cagtagatca 360  
ataatcaaat tatataggtc ttctattttt ggcagatttt tctgagttcc agaagtt 417

<210> 7801

<211> 409

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-032-Q1-E1-D10

<400> 7801

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cgagagaagg tgctctacgc cgtcaagcgc tactggaccg ccgacagcga caagagctcc 120  
caagagaaga aggcaacttc ttctgagggtg tgaaatataa tggtgagtga gatgagctga 180  
gctgatgcac tgcaactcag gagatcagcg tgtgtttatt tcaacttctt gtgagtttct 240  
ctcgagtgtg gcagtgagat cagcacgtgt attccttttt gattacgtcg tgtaggatga 300  
acacttcttt tccatttttt cgagatgaga tggtaggaaa tattcgacac aaagatctac 360  
gtaccatttt ctgcnegtca cagattcaag aatgttggtt tggcactcg 409

<210> 7802

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-D11

<400> 7802

gggtcgacgg gtatgacgat cattaaacgg ataatgtttg caaaagcaaa tgaaatactc 60  
 cctcagaggg agtagcatac ctttccgac ttcgaaagtt tatctgaaac tgcaaccagt 120  
 ggaatgctgc catcagtcga tttagcatca tgaagtgtga tttttggagc tgctgctttt 180  
 gccttccttg cagtagactc tgtcttcttt cgtgggtttg gtttctcatc aacggaggag 240  
 tcatcgttac tggatagctc tgtttagca tctaagtc gccgtgacat tgcttcctga 300  
 agttacagaa gaagatcagt tgtcattgct caggtagatg aatttcaatt gcatgtaaac 360  
 ctaagcaatt cagaataaag cagtgcataa aataagatat gccattgca caatgctcct 420  
 gattcacaca tacact 436

<210> 7803  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-D12  
 <400> 7803

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 tccattccat aatgtagtgt atatagattt ctacaatagt taaactttgc aaattttgac 120  
 aatgcttcgt gataaaaata tttatattta aaataccaaa tgcataactc tggatacatc 180  
 atgagttaac tattcatatt atatatgttt gacattgtac atatagatag tttgttcata 240  
 aacttagtca aagtttggtta agcttaactt ttcaaaaaaa tccttttttg cggtaaatta 300  
 tggaacggag ggagtgccta gaattgcaat ttgaagttac acataagggtg ttttccttgg 360  
 agttcacgat tagaacgtaa aacagaatgt atcacctgt c 401

<210> 7804  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-D2  
 <400> 7804

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 catgcagctg gtgcacgatg gtgacttcat ggagctcatg ttccaagcaa ccctctcctt 120

gttggtcag gaggttcgag atcgagcttg ggctgctgat acctcttctt cgccgcccac 180  
caggaatagc atgagatgag cagccaatcc ctcatctcta gctttcatac caagattctg 240  
tgcaccggtt cccctacggt tgaagatgga gagccattgg tagtagagag ggggaaggga 300  
tgtagagacg gaagcagctt cacttgcccc gtctcccacc ccattgccga tgcagcggtc 360  
gaaggagttg cggacctcgc caacaagcct gtgacctgc atcagcgatg gcttgatgta 420  
cgcaactggaa acctccta 438

<210> 7805  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-D4  
<400> 7805

gggtcgaggc gatggaccaa aaagtctaag gttaaactact cacacttcat cgaagaggct 60  
atgatgatgt agaagccctc catgatgatg gccctcctcc ggcggagctt cggaacaggc 120  
cctaagatgg gatctcgtgg atacagaaag ttgcggcggt ggaattacat ttttggctcc 180  
gtatctgttc gtttgggggt acgtaggat atataaggagg aagaagtatg tcggtggagc 240  
tctgaggggc ccacgaggca ggggggagcg cccccaccc tcgtgaccgc ctcttttgtt 300  
ccttggcgta nggtccaagt ctctggatt acgttcggtg agaaaatcac gttcccgaag 360  
gttttattcc gtttggactc cgtttgatat tctgtttctt cgaaacactg aaataggcan 420  
aaaacagcaa ttctgggctg ggcctcc 447

<210> 7806  
<211> 395  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-032-Q1-E1-D9  
<400> 7806

gatggaaaac atggtgtcca atgaggaatt caatgtggcc ttggatacat tgaaaacatc 60  
aatgacaacc acggtagaaa gcatgtttta taaattctta gaaggactta aactacctac 120  
ctcgtcgttg aaagtgggtg atcccactaa caaggtgaca gatgctaact ctgacaaggg 180

ggaagctaag agtgagaagg gtccttctac tagtggtaga atggcaccga catctttgcc 240  
catgtagaac ctccaactta tggaggaccg attccctcta ctcatTTaaa tcatgccggg 300  
cctcctaaga ttgtgaaaaa tgaggatttt gattcttggg tgtatcgctt caagcgcat 360  
ttaaatacatg tgaataactaa tctttggaga atcat 395

<210> 7807  
<211> 449  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-032-Q1-E1-E1  
<400> 7807

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agccgcggta caagaagcac gacgacgacg atgatgacca cgagaggagg ccgcgggtaca 120  
agaaacgtga cgacgacgac gatgatgacg atgacagaaa gccacgttac aagaagcgct 180  
acgacgacga cgacgatgat gataggaagc cacgttaca gaagcacgat gatgatgatg 240  
acgacgacga tgataggaag cagcgtcgcg ggaacaaccg ccgccgccac gatgacgatg 300  
actgattatg acatgagttt aagctgacgc taataagcat agttgcggcg gctttgcac 360  
gatgaattac gacatttcac tttttttcca agcatttttc atttcgctgt tcaactggcca 420  
catgcttcca atcgtatgct cgagcttct 449

<210> 7808  
<211> 312  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-032-Q1-E1-E12  
<400> 7808

acgcgctgat gaatatgggg ccgcactaca tgatgaagac cgagtcacgc gtggatgtga 60  
agacaggccg catcgtgaat atcaccggcc atcgcacaa tgccgatcat ctacagggt 120  
cctcactgca gatgtcctac catcagccca gctacacaca tgtgcatcac gtcaaccatt 180  
cgctagctgg cttactctac agtatgcaat catgcatgtt ccgtcgatgt acttcatcaa 240  
ccttaattgt caatgggaca ctactttat actgctcaag tcacgtagca gtagtgtgcg 300

atactcacaa ca

312

<210> 7809  
<211> 453  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-E2  
  
<400> 7809

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gaacaagcgg gcgcgctcgg gatcggggtt accatacaat ttttcccagg aaccttttagt 120  
gaatgtgcta atggagtcaa aggggtggcaa aaagtctagc agtagtagtt ccctgatgta 180  
cgaagctccc ctcggtaca gcattgaaga cgttcgacct gctggaggcg ccaagaagtt 240  
ctctgctgca tactcgaact gcgcgaagaa gccatcctga tatcgttttt ggcatcccct 300  
tcccgtagtt taggattttt atgcaatttt attctgactc ttttctcnca ccaatctctc 360  
tggtttgctg cttcacgata atcgaccagt tctctagtct ttctcnctct gtteectctct 420  
gctctgcttt ctgactcaaa actgcaacaa tgg 453

<210> 7810  
<211> 449  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-E3  
  
<400> 7810

gggtcgagcg ggatattaca gtagaaacaa cgcaaaaaca aaatatgaat tggtttgcaa 60  
cagttcttag agtagtgatt tgctttatta tactaacgga tcttaccgag ttctctgttg 120  
aagttttgtg tggatgaagt gttcgatgat cgagaaggtc tcgatgtgag aagaaggaag 180  
agaggcaaga gctcaagctt gggatgcccg aggcacccca agtaaatatt caaggatact 240  
caagcgtcta agcttgggga tgccccggaa ggcatcccct ctttcttcaa caagtatcag 300  
tatgtttttg gatttgtttc gttcatgcga tatgtgcaat cttggagcgt attttgcggt 360  
tagttttcat ttttatttta tgcaccatga cggtatgata tagtccttgg ttgtttatag 420



aatgctcatt gcacttcact tataatcttt

449

<210> 7811  
<211> 440  
<212> DNA  
<213> Triticum aestivum -  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-E4  
  
<400> 7811

tatgtcgtgt acaagggttaa gggtcccga gtctacgatg actgggagga gtgtcggaga 60  
caggttcacc gattcagcgg taacagttac aaagggtaca cactanggc cgaggccgaa 120  
tctagatacg cccgctatct agcgggagag gggaggagc attggaggaa ccggatgaag 180  
acgagtttca tcgtgatgat gtcacgtgtg atgacccag ctctcttcta tgtgatggtg 240  
gtttagatga tcgatatcga cttgtaatgt gaagacaaac tcgtactcg cggctctcgag 300  
acttgtaata taatgttcta tctctgttcg gtcttttcaa ttcggagact aatatgatga 360  
attgtattcg gagactaata tgatgaattg tattcaaaga ctaatcttct attgtattcg 420  
atgaatctgt tgttgatgtg 440

<210> 7812  
<211> 464  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-032-Q1-E1-E6  
  
<400> 7812

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gaagaagaag aacaagaaga acaagaagaa caagaagagg aggaggaaga agtagacgaa 120  
gaagaagagg aagaagaaga agacgacgaa gaagaggaag acgaagaaga agacgaggaa 180  
gaagaagatg aagaagacga agacgaagaa gacgaagaag aagaagaata agaagaagaa 240  
gaagaagaag aagaagaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa 300  
gaagaagaag aagaagaaga agaagaggcg attgaaaagc aaacggaaga aatacagaca 360  
gatgagcaga aacatgatga cagtagggct gatttcacca cagagacaat attggagccc 420

cagagcaacg anattgacac aacaaatagg aaagacaacg ctga

464

<210> 7813

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-F11

<400> 7813

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ggtgaagcgc gacaacatct gcagcttcat ctcgagagacc aaccccgggc acttgcggtc 120

gtgggagacc aaggacagcc agctgacgat ggtggcgagc gacctgaagc cgcgggcggt 180

gctgacgtgc ccggagaaga agttgatcca gcaggtggtg ttcgccagct acgggaaccc 240

gctggggatc tgcggcaact acacggtggg caaatgccac acgccaagg ccaaggagat 300

tgtggagaag gcgtgcgtgg ggaagaggag ctgcgtgctg gccgtgtcgc acgaggtgta 360

cggcgggggac ctcaactgcc cgggcac 387

<210> 7814

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-F12

<400> 7814

gcgcaaagag agacgcttga ttttggaaca acagctagct tcttctcaag ttcctaggga 60

ggagcagata aaattgataa aggagttgca gaggaaggag actgaatata tgagacttaa 120

aaggcataga atttgtgtgg atgactttga gctgctcacc atcattggaa gaggtgctta 180

tggggaggtt caactatgcc gggataaatc ctctggtaat atttatgcaa tgaaaaaac 240

taaagaagtc tgaaatggtt gtcaagggtc aagtggagca tgtagatct gaaagaaact 300

tgctggctga agttggtagt cactgcattg tgaagctata ctattctttc caagatgctg 360

agtatctcta tcttatcatg gag 383

<210> 7815

<211> 395

<212> DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-032-Q1-E1-F2

<400>      7815

cgtaatactt acgtggacga gcacctgatg tgcgacatcg agggccacca cctcgccctcc    60

gccgccatcc tcggccacga cggcaccgtc tgggccaga gcgccgattt cccgtcgctc    120

aagccggcgg agatggccaa catcatgaag gacttctacg agccggggac cctcgccccg    180

accgggctgc tactcgaga cgccaagtac atgggtcatcc aaggtgaacc tggcaccgtc    240

atccgcggca agaaaggccc gggaggcatc accctgaaga agaccgggca ggctccggtg    300

gtcgcatct acgacgaccc catgacctcg gggcaatgca acctggctgt ggagacgccg    360

ggcgactacc tggtagagca gggcatgtcg acgac                                    395

<210>      7816

<211>      447

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-032-Q1-E1-F6

<400>      7816

attcccgggc cgacgggtca ctcaatctct ctctctctct ctctctctct ctctcttttt    60

tgagggactc attccttctt cttaattctg ctagtcagtg gcagaaaact ctttgtggaa    120

gggaaatccc atgcggctgt agccaaatag cgctattaat tttccttgaa ccagataagt    180

gtggcgtgct ctcaattgtt gtaggagatg ggatcatag gacttgtatt tgtaatttgt    240

tttatttttg aaggtacgta caagtaaatt gaaatcttgt tcatttcttg ggtgtgacaa    300

gtgctcagtt gacttagatt tgggtaagtc taagtcgggt gatatcagca tgtttctacg    360

ttatttttct atttttatgt tttctacat ttttttaagt gcaggtgaaa aaattaagaa    420

tttaaataatg ttttcgcctt ggaaaaat    447

<210>      7817

<211>      414

<212>      DNA

<213>      Triticum aestivum

<223>      unsure at all n locations

<223>      Clone ID: LIB104-032-Q1-E1-G10

<400> 7817

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aggttgctta tgtcatgtgt gtcattggtg aaccagtttg attatgtcgt gtttggttagg 120  
gttgaacaag tttgtttatc tcatcaagta cattgttttc ttatctcatt atataagttt 180  
gctagcttcg tattttgttt atccatcatt tcaaattcaa gtagcttgcg agtggaactt 240  
tgtggctgct gttcagtact agttatcaag caactattca cacaagggtc ttccatgtgt 300  
agtttggtt cagcattgta tggaaaacat aacgttgaaa acaatcagta caatttgagc 360  
tgcttagcag cgcttcanaa gttgaagtaa tttnttttag tacttcatgt actg 414

<210> 7818

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-G11

<400> 7818

gtattatcat ggttgagttt tgttacgttg atgcagggtg cttagggtcat gtgtgtcatg 60  
gttgaaccac tttgattacg tcgtgtttgt taagggtgaa caagtttggt ttatcgcatg 120  
aggtacattg ttgtctgac tcattataca agtttgctag cttcgtagtt tgttttagcca 180  
tcatttcaga ttcaggttcc ttgcgagtgg aactttgtgg ctgctgttca gtactagtta 240  
tcaatgcgac tagtcagaca gaggtcttcc atgtgtagtt tgggctcagc attgtatgga 300  
agacatagcg ttggaaacag tcagtagag 329

<210> 7819

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-032-Q1-E1-G12

<400> 7819

gtcctactaa caaggcaaga gatacctcga ttgccttcgg aggcacgtc acggtgtcat 60  
gtggccattg ccaccctgat attgtcaagg ccgtgcagga ccagaccaag ttgcttcagc 120  
acaccaccac catatacctg catcatgcca tcgtcgagtt tgccgaggcg cttgcctcca 180

agatgccagg caatctcaag gttgtgtact tegtcaattc tgggaccgaa gcgaatgaac 240  
tagcaatgtt gatggctcgg ctgtacagcg ggaatctcgg tatgattgca ttgagaaatg 300  
gataccacgg tgggagtgtt ggaacaatag gtctcacggg tttgcagacg tggaagtacc 360  
cgattcct 368

<210> 7820  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-G4  
  
<400> 7820

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agactacctc catactccta tgattctgag gctgtttgga tacgaattcc acggtcagca 120  
aaaatagctg tggaggaaag gaaactagag tttcgtggtg gttcacatgc tgcttcacac 180  
gcactcttga atatattgcc tctgcatatg atgtgtagtg cttctgacct gggaaactgag 240  
tgcgtaaatc ctcatgaaac ccgtggtatg cctgaaagaa ttcttttata cgataaacac 300  
ccagggtgga tcggcctggc aacgcaggtt aaaaaacttt ttgggggaact tctgcttgct 360  
gcttttagagc ttgtttcgac atgcagttgc cctagtgcct ctggctgtcc gaattgtatc 420  
caatcattga catg 434

<210> 7821  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-032-Q1-E1-G5  
  
<400> 7821

gcgggtcgat gggagtccca aagtgggtata gatctatgaa ggataaaca agaaaaaat 60  
tccatgaaga tcattggaca aaataaactt tattcttagt aatagttttg agatatgatg 120  
atgtgatatg tgagttatgt tgatgagtaa ttgtgctcta gtaagaatat tgggtgtaa 180  
gtttgtgatt ccctatgcat gcacgaaagt caatagtcac gcagtgaata ttatgtccta 240  
cttgtgggtgc attatttggg gttaattatg cttaatgctt gcttatgaga ttattcgttt 300

cttgggttggt cttttcccaa acttttgcta accttcattt tgcactaagt atgacctcta 360  
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 atg 423

<210> 7822  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-G6  
 <400> 7822

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 ccggggccgag atcgtcttcc tcgattcaac gagagttgga agcgggatag ttcttggggc 120  
 accggaagcg tcgcacgcat ggcagatgag gaggtatctg acccaaaggc actcctagag 180  
 gatcgtacga aggctaagtg tgtctaccac tggatgaat atcagaaatg cgttaagaga 240  
 attgaaggtg atgagaccgg gcagaagcac tgtactggcc agtacttcga ttactggaaa 300  
 tgcacgcaca agcatgttgc tgagaagctc tttgatagct taaaatgaca aggaaattgt 360  
 tctctctagc tacttttcac tcaacagtgg taataaatag tatcacttgc acgccttatt 420  
 ga 422

<210> 7823  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-032-Q1-E1-H10  
 <400> 7823

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 acttattaca tcgaatgtct caaaagagaa cttattacaa aaatatggct taaggccaac 120  
 taaataagat aactgcggaa gcatcgaaga taaatgagtc catcaactcc aatggcatag 180  
 ctgagtgcac gacaacgacc tagcgacact tactcttcgt ctgaaaagtc tgcaacataa 240  
 tacgttgcag cccgaaacgg gtcagcacat ggaatatgct ggcaagataa cactgtagag 300  
 caatgaacaa tgaacaacta taactatatg catatatggc tgggtggaggc tctatgggta 360

tttatgcaga aagctaattt ttcctataa ca

392

<210> 7824

<211> 341

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-032-Q1-E1-H11

<400> 7824

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tgcattcgcc gtgtcagcgg ccaggcgacg cggaggggat gaagggcaga gagagaacat 120

gtttctgtct angtcacact gcttacttan gggaagtga gggcccgaca gaaggcatgc 180

aaatattgaa gagggccgag actaatttgt taactgtgat tttaaggttt atcgtctgtt 240

tattttctaca attttatttc aactttctat acatgcatac atgcaaaaata cgcaagtga 300

catgtgtgca attttccccg cgccgatgaa aacattttta g 341

<210> 7825

<211> 427

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-032-Q1-E1-H2

<400> 7825

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aaatgatgaa cgccgagaaa gtctcaagg ccatattggt tgtgcaacag aacctcacc 120

catttgcaaa atcttttctt caagaactgg agccaaagat ccacttggag gttttccagg 180

atgccgaaat gcttataaat atcaaggaac atgttctcgt tccggagcat caagtgttg 240

ctaacgagga aaagaagacg ttattggcgc ggtacgcttt aaaggaaact cagctaccaa 300

gaatacaaat tacggatccc attgcgaggt actacngcct caaacgaggg caagtggatga 360

agatcatcan ngccagcgag acagccggca gatacgtcac atatcgctaa gttgtatgac 420

agtacac 427

<210> 7826  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-H6  
  
 <400> 7826

cgggccgacg gggattatca atttaaaacc tgtgtctttt tctttttttt cctagtttgt 60  
 attctgtttc tttttcattt tctcgttttc ccttttttat tttccaaaaa tgcttattct 120  
 tttaaaattg gttcaaaatt ttaaaacacg tttgtttttt caaaatatgt tcaaggaatt 180  
 aaaaatattt ctatttttaat aagttgtaga actagtgaat atgtttgtat cttaaaaatt 240  
 gctcacattg aaaaaagacg aacattttta aaaagagcga acaaaattta gatcatggtt 300  
 ttttttgaat gtagaaaaga ttagaaaacg ggaacatttt ctaaaattct gaacaaattt 360  
 tgaaagcatg agcattattt gaaactcctt gaatttttta acattgaact tttctgaaag 420  
 ccatgagcgc ttggctggcc gaacgggtgc ctg 453

<210> 7827  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-032-Q1-E1-H8  
  
 <400> 7827

gggacatgct agatgacgac attgttgcag aaacggcaaa tgcgacacct tcagagaatg 60  
 aaccagagga gccggaggca accgcaaagg cttttttgga ggtcatggcc tcgtcgaaga 120  
 aacctcttta tgcgggtgcg aaaatatctc agctggatgc catctcgcaa ctgattgcag 180  
 tcaaggetga gtacggctgt agccagaaat gcttcgaagc attcctggga gtatgggcta 240  
 acagcctccc tgagggtcat gaactgccga aaagcatgta cgatacaaag aacatcatga 300  
 aggcactctc tatggattat gacaaaatag atgtttgccc gaagaattgc cttttgttta 360  
 ggcacgagta tgcggatgac atgtactgt 389

<210> 7828  
 <211> 57  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-032-Q1-E1-H9

<400> 7828

gtcgtattac gagcaagatc gtcggcttcc tgactatacg cttcgtcggc acgtccg 57

<210> 7829

<211> 168

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A1

<400> 7829

cggggagcga cagcgttttt atgtgcattt gtatgcacga cttgttgagc acgacatggg 60

catgaatgca tggtcgggtga tttgcttcgt cgatgttcat accgacttct acatcatgag 120

atctgtacag ttcatgtaat catgtgcacc tttctgtgag aactctgg 168

<210> 7830

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A10

<400> 7830

attcgccggg cgacgggggg caagaagagc agcacatgat agcttttccc cacggatcct 60

tctcgtcttc cagtgattc aagtcgtctc gcctctctcc gtcagcccaa acatggacgc 120

aagcacgcgc ccgagtggaa gccaccaatt gcctgctgca gaacaagaag ctgagcagct 180

tgtaaatgct gctagggctg ctaaaacggc gaggcttacg caagccacat aagaggctga 240

gagagaaata gctgagtacc gtgcacaaat ggaggctgat ttccagagga agtcaccga 300

gaccagcggg gactctggcg caaacgtcaa acgccttgag caagagacaa acgtaaagat 360

tgagcagctc aagcagcagg cagcaaacat ctctccagag gtgattcaga tgcttctgag 420

gcacgtcacc actgtg 436

<210> 7831

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A11

<400> 7831

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tacacgaaat cgacgcgcca ggccgcaaaa aagaccaaca aggccaccgc caatgtcggc 120  
atggctggct acgcatgacg agggagaagg actctggttt gatggaactt gcttgagtgc 180  
tggatttaga tagatattct ggagcagaac gtagtagttt ctggaaaatg tagcgtgtgg 240  
tatggctctc tatgatcaga tcagatgtgt ttgttcaggc ctagttctcg tcttgccctga 300  
tctacagaat atttgatgtc caagacagcg gcattgtgat actcctagat ccaagttgtg 360  
agagtgagca tgatcatatg agaggggtga accggatggt ccaactgcaa cgggctaaga 420  
atTTTT 426

<210> 7832

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A12

<400> 7832

attcgccggt cgacggggag gagtgaccgc ccagggccaa gcccttggtt aaatcgtaag 60  
tatccggata cccgagtaat tcatactatt cctttgttgc acagctttcc cttatgtcga 120  
atatgtttat gtagccaccc aaagaccggc tcgatgcgtc gtcgagcggg tcaactggact 180  
cgtcggatgt gaattcgctt ccgacggctt cctccccccg ccctacggac gacactgaag 240  
tgttgtccca ataggttcca atccaggagg aggtggctct ggaggcgccg caaggtgacc 300  
tcccggaccc caggagtga ggggacagaa cccccaggg ctccaagtcc ggccttaggc 360  
cggacaccgc tccggaacct tcaaaggttc cagagtccgg cgggcgacct ccttccaaga 420  
ggatcaagcc caccgtgccg ggga 444

<210> 7833

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A2

<400> 7833

cggggtcgacc ggctgtgcag aagaaaaccc ttttttttag gaacagaaga ttgccctttt 60  
actctcctag taggaatatg tatgtgaatc accacagaac accccctaca gcacaaacta 120  
ttttacataa ttacatttca cttttcacct tgcacgattt cctctgtgat ttccccata 180  
tatgacttgt ctgttttgtg aggtatggta gtgctcacat aattttcttg tattggacga 240  
tgatgctata ggtgtcgagc tttgcatat atgatgatca actgcatgca tagaaagata 300  
tagcagttga tttgcttcat agtatgttat tgctaggctg ctagttttgt gtcactcagt 360  
caagtaggtt atcatatgct tttagtgttt gcgagctatg tgcataatgta tacata 416

<210> 7834

<211> 363

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A3

<400> 7834

agctcaaacc gaagaaaaac tagacaagat gcagcacaac gacgatgata atgtcgactg 60  
cggcgttggt ctcgatgtg tacagaataa ttctctgcta tcaggtggta ataacgcacc 120  
ggaacggacg ctgttcttga tgcgcggaat ggcaaggcaa agcattcttt caccgagcaa 180  
tggtgattga cgacttgatt acagacaaga tagatttggc acattcttac ctgtaaagat 240  
aatttgccaa ataaagccgt ttataagctt tgccactttg ataattctct gtactgacac 300  
aatttgaaag aattcctttg acaaaaaaaaa aaaagacaaa aaaaaaaaaa aagcggccgc 360  
tct 363

<210> 7835

<211> 352

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-A5

<400> 7835

cgatcccaag gcatttgta aactaaaaat cattggagat tgcacogtgt aatacaaag 60  
gtttgtgact tcggccaagc caagtgtatc atgtacatac cacggatttc ccgaacatca 120

cactaagggc tgggtcaacag ctcttgcaat caaacttcca agggtaaatag aaagcaatta 180  
agccgcataa tccttctctcc aacaataacg ccttcgggaa acgagacgtc cgctaaaggt 240  
cataatgtgg aggatgaaac accccttgta gcacctacgt ggggaaagaa gccacgact 300  
ggcaaatttc aagataaatg tggccgcata tggatcaaaa tttaactaag aa 352

<210> 7836  
<211> 355  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-A6  
  
<400> 7836

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cgcccggcga cggcgaggtt cctggcaciaa ggcctcgggtg ctatcgtacc cagcaggagc 120  
gtatgcgtat acagagagag aattgttctt aatttcagtg cccgttggtt taggttctac 180  
atatatactc ctaaggatgat gcacgcatga tcagtactgt acccgcctac ctgtgtgcgt 240  
gtgtgagata tttcatgtat cgtccgtgt gcagtgccat attcatgcac cgcgtcgtgt 300  
gtaattaacc ggtgtgtacg agaccgatat actactcagt aatactgtga ttgag 355

<210> 7837  
<211> 340  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-A7  
  
<400> 7837

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ccatgaccaa caagtatttt ttcttatggc ttcctccttt aaggatocaa ccatatcaag 120  
ccccagacg taaaaggcca agttatgggg attgtttgta cggcgggtggg tggcatatgg 180  
ctttgggttg caaaaagctg gcatccgacg caatgttgga caaggctctg tgcgtctgcc 240  
cgggccgtcg gccagtaaaa acatgtacaa aaggccttgc ttacaagggc ccgacctgcg 300  
gtgtggtaac taaggaagcc ctgaattagg gggatatccg 340



<223> Clone ID: LIB104-033-Q1-E1-B2

<400> 7840

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agggccacaa ggacgacgac ccaccacaac accatcatcg catcccatta gcatcgccag 120  
tttccttgga gagaagtagc cagaaacagc agcgccatgg ccggcatcat gcacaagatc 180  
gaggagaagc tccacatggg cggcggcagc gacgagcaca agaaggacga ggagcacaag 240  
aagaaggacg gggagcacaa gaaggacggc gagcacaaga aggacgggga gcacaaggag 300  
ggcatgatgg agaagatcaa ggacaagatc agcggcgacg gccacggcga cggcaagaag 360  
gacggcgagc acaacgagaa gaacgacaag aagaagaaga atgacaagaa gcac 414

<210> 7841

<211> 351

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-B3

<400> 7841

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aagccccgta ggagacagag aaagggcatt ttcgtaccg atgctcatct tttggctgtg 120  
attatgaaac catcattcgg aacaaatctt cagttgtgga ttaaatacgtt ctgtagtgat 180  
ctttcgggct gtttattttt tcttttcctc tttgaatgtg ctgtagtggc cttattacat 240  
catcgtatctt gtcttcgaga acaaaaaaaaa aaacaataaa aaaagaaatt actgcagcac 300  
aaaaagatac aaaggtgaaa taagacgata aatgaaaaaa cataaaaagc t 351

<210> 7842

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-B6

<400> 7842

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tgaacacggt ttttgggtta tgtttgacgt aagtatgagt ttaggatcac ttcttgatca 120

ttgctagctt cagcactgta gcgacccgac ccgaatggat cgaatatcta tgcttaagtg 180  
 tcatccctgg atcggtatgc tgacacatac agtactcgag gatttataac agaggtaaatt 240  
 cacatgtata aagtaacgta aatattatta cctcgaatac aaatagcgga agtaacaagg 300  
 ttgtggattc ccatcaacac caacgacaaa gttgagtgtg gaaaccgtaa ccctaacgta 360  
 tcacttactc gtcgtaagat atcttgcaac atgagacggt gcaaccatgt aggtcagtac 420  
 attcaatgta ctggcaaatt cacaccatag 450

<210> 7843  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-B7

<400> 7843

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 cccttggtgg agctacaaaa ggcaacaaac aattttgaca aagctcgga gattggtgga 120  
 ggagggcatg gcacggtcta caaagggatc atgtcagacc tgcattgctg ggcatcaag 180  
 aagtccaagg tcgcgatcca gagggagatc gacgagttca taaatgaggt agccatcctc 240  
 tcgcgatca accatcgaac cgtggtgaag ctctttgggt gttgccttga gacggaggtg 300  
 ccgttgctgg tgtacgagtt catctccaat gggactcttt accatcatct tcatgtccaa 360  
 gaacccgcgc catccctagc atgggaaaat cgggtaagga tcgcaaccga aactgc 416

<210> 7844  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-B9

<400> 7844

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 ccaagctcaa gtccgtctcc atctccaagc ccaagtccaa gatcgggtcc gccaccagct 180  
 ccgccccggg ctccgggtcc aactcgtgat aggtgatag gttttcatat ttgatagctc 240

tttatatgtg gttgaggaga gactgcatat tatgtttgat tgcaagcttc gagtcaactca 300  
 ttatgatagc tctttagtta tatgatcttc ttggtattgt ccaactgtaat gtatggcgcg 360  
 taacatattt gacctgctat agcttaattt tcatgccttg cc 402

<210> 7845  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C1  
 <400> 7845

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 ctgtgcaatc atcagaccag ctggacgagg cttgtcctgt tttgactagg atagttgaca 120  
 atggaagaaa ttgatatggt gttgagctat tagtaggaat gcaatagctg aattacagcc 180  
 ctcttgattt ttttcgatat tggttcgatg ctaaaaatag tacacaacct aacagaaaga 240  
 gaagaattgc cctctgtaat tcagcatttg ctgctctgtt ttcattgttg cctctgcatc 300  
 ttgcttattg ctgtgcaacc gtcatactag ctagaccagg tttgtcttgt tttgactaga 360  
 ataattcaca atggaagaaa ttgatatgat gttcctccga ttattagagt gtaacggctg 420  
 aa 422

<210> 7846  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C10  
 <400> 7846

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 gaagaggatg gccacactga attcctgcaa ggatgaggac agttcatgct catcggagtc 120  
 cagcaacagt gagtgtgaag gggaagtcgt cagaatgagc cgctgtgcca ccatttctgt 180  
 gcctcgaaca ccatctgcaa gcacagtttt ccccatcata gtgccacaaa tctcagactc 240  
 cgttgcaactg gatgctcaga tcatttctgg gtctgcaaat gcaatgcagc gcactaccac 300  
 cagcattgcg gttgtcgaaa aaccagtgtc gaacagaatc gaggtctgca tgggtggcaa 360



atgcaagaag gcgggctcgc tcgccgtcct gcaggagttt gagacggtgg ttggcacggg 420  
cggcttgg 428

<210> 7847  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-C11  
  
<400> 7847

gggtcgacgg gaggtactaa gaggcgcac cggtcacgtc gcctccgcag gcgccggtgc 60  
agctcacgcg ggccgcgcac cgggcgatcg agaccgtgca gcagctcata ggagagccgc 120  
tgagggagga tgggccagtg cttggcgatc actttgatcc gcttcctcct ggtgcattcg 180  
gagcgcctat gcctgttggt ccagagcagc ggaagcagcc ttatcgatca catgagacca 240  
gtgtattttc tgcacacgat cccaagccca tgaaggcatc agcattcttg ccaagcatag 300  
acccttctgt ttcaagtaca gttaccggga agaggaagta catgtctgga aattcttctc 360  
atcttccttc acgggcagta catgagtacc agtttcttcc agaacacact agcgatatat 420  
atgagagaac 430

<210> 7848  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-C2  
  
<400> 7848

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tcctcacgat tcatgactct cctgagtcct ctgcaccca gcgtctaact gtaggtagac 120  
gtcacacaca tatgtgctat tcacacccta ccctcagaac ttctaaaaaa taaaagacgc 180  
cgcacacctt ttattttaac tcacacgtca cacatttata ctagtactgt tgtggcgaac 240  
attctttggg cgtagtatat tgtactctca cggagagaag cagtgcacgc acacactagt 300  
tctctcacag ccactcgga gtacacgtag gagcacattt tttgaagcta ggagcgcatt 360  
tgtttcaaaa gaggcacccc aattgacatt ttgactagtc tagttttcaa cttgatagag 420

ggtcgaggac cgcacatg

438

<210> 7849  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-C3  
  
<400> 7849

cgggtcgacg cggcatcgag tagacactgt tattgtgaga attcttaatt caagagttat 60  
agggagggac ttatgtcacc acaaacagaa actaaagcag gtgttgatt taaagctgg 120  
gttaaagatt ataaattgac ttactacacc ccagagtatg aaactaagga tactgatatc 180  
ttggcagcat tccgagtaag tcctcagcct ggggttccgc ccgaagaagc aggggctgca 240  
gtagctgccg aatcttctac tggtagatgg acaactgttt ggactgatgg acttaccagt 300  
cttgatcggt acaaaggacg atgctatcac atcgagcctg ttgctgggga agacagccaa 360  
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ttt 423

<210> 7850  
<211> 308  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-033-Q1-E1-C4  
  
<400> 7850

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ctgctggagc ttttctccct ccgtgcaccc aagaagcctt tgtgcaaat ttgaaccaga 120  
cattgctttt gtagaattgt tgttgcttag tattacgatt ctagcagtag cgctcgcttt 180  
atatatcccc tactttotaca tgtactcaat tgtacatagc tcgcccccat ttgtactcgt 240  
acgatcttaa agaattatcg tcagagctaa ttgggtgatca tcgtgtacat gctgtttgat 300  
gcttaaaa 308

<210> 7851  
<211> 436

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C8  
 <400> 7851

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 tttctataca gattttacat tttttaaatg gttgattaca tttagaaata caagttaaac 180  
 attttttaat acatgggtcaa cattttttgc atacgcattt aacattttta actgcttgat 240  
 taacatattt catatattta tttattttca aatgcttgga ttaacatgtt ttaaatacat 300  
 gatcaacttt tttcatacac attgtatatt tttgtacaca ttttctctat acacataata 360  
 tttgtcaaat gattgattaa cattttttgg aaatgttttg atgtagatta tttttgtaat 420  
 atgtttatta atagta 436

<210> 7852  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-C9  
 <400> 7852

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 atattttcag attacaaaaa cctatatcta ccatccatat tgcacttgta tcaccatctc 180  
 ttggccgaac tagtgaacct atacaattta ccattgtatt ggggtgtgtg gggacacaag 240  
 agactctttg ctatttggtt gcagggttgt ttgagagaga ccatcttcat cctacgcctc 300  
 ccacagattg ataaccttag gacatccact tgagggaat ttgctaccgt cctacaaacc 360  
 tctgcacttg gaggcccaac aacgtctaca agaagaacgt tgcgtagtag acatcacctt 420  
 ggtgtttggg 430

<210> 7853  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-D1

<400> 7853

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attatgagag aggaactaca tctccgcctc tttatgtttc caacacgata aaattgaaag 120  
aaactattta tactatgcat tggcctttac tttgtgagca tgaattgttc tttcatgaca 180  
tgccgatgca taggaagaga gttagacttc gttattgctt gatttatgtt actttgtgct 240  
cactactaaa ttacaaatca ttgtttatta aaattggctt tgatatacct tgggatccag 300  
gtggatccat tacttgagca ctatatgcct agcttaatgg ctttaaagaa agcgctgcc 360  
gggagacaac ccgaagtttt agagagtctt tatttctatt gagggtcttt atatagtct 419

<210> 7854

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-D10

<400> 7854

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ggacggcgac gggaagaagg acggcgacaa gaaggaggag ggcgacggca agaaggacga 120  
ccagaagaag ccgcccgcg tggccccgct gccgtaccg caccacatgc cgctgccgca 180  
ccacatgccg ccgcccata tgttcaacgc cgactacatg atgaaccagt accggccggc 240  
gccgccggcc taccgcgcgc cgtacgtgcc gccgcagcac tactacgtgc ggaacatgag 300  
catggaggag aacccaaact cgtgcgtcat ctgctaagtc aaagtctatc cctcgatcgc 360  
tcgcgtacgt cccgtggggc gaccatgcat gcatccgtgt atagtagtat tttctcgatc 420  
gtttttacg 429

<210> 7855

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-D12

<400> 7855

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gtccgcgtca gtttctttct gtccgtcttc ttctcccaac tgggtggagt gattgcgggg 120  
tttgccttaa actactggtt gcagatacag gagaagtga agtttggtgg ttttcttgag 180  
atcattccct tggcacttgc tcttggttcc tggctgctgt tccatggttt ctttggtggtg 240  
atctccatat cccaaaactg actctggact tgatgagtat gaagccggct atgagttctt 300  
cgaattagtt tgatttatgc tttcttcaaa gttgatgtcc atgtgcggac aagatcaaca 360  
tttatgcttc catgtcttag tttttaaaaa aagctgtgcc ccgtgggcaa gagca 415

<210> 7856  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-033-Q1-E1-D3  
<400> 7856

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tgtctttttt gctggttcca acaacctttt cgccggcgga gctgcaaccg gtgtgttgca 180  
aagctggaac cagcgtccac cgatgctgga accatgcata tttttgcgac aagcatatcc 240  
atgttttggt ggaaaccatc tcatttttgc tggaagtacg cgatctatct ttttgctgga 300  
accatatcat ttttttgctg gatccttgat ttttgctgga acgtctttgt tttcgtaca 360  
aatggcatcg aaaattgaca ccatg 385

<210> 7857  
<211> 452  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
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<400> 7857

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aaatttgaac aagtccattg atttgttttt cttttctgaa cctgagagtg tacagcacct 180  
 gttgtgtgac tgtttggttag ctagacttgt atggaagcaa atcagttgct tattctctat 240  
 gcaaattgga gtttcagtag agtcagttac ttccctttgg gttgctggta aaataacttga 300  
 cgctctgaat actgctgttag ctgctgtgct ccgggctttg tggaaacaca ggaatgccat 360  
 gatctttaat tgagttgttt ggttttcctt gaccaagatc tggtcgctga ccttacgaat 420  
 gctcaggaga tggcgatcgc tcttcanaca tc 452

<210> 7858  
 <211> 91  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-D8

<400> 7858

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<210> 7859  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-D9

<400> 7859

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 cttacccttg aatgcaactt caaaccctt caaaagtgcc accaaatttc aattcaoggg 180  
 ccttcgttta aaaacttctt aacgggaaaa accctggctt aaccaatta aaccccttg 240  
 cagaaaatcc ccctttccca acctggctta aaacaaaaaa ggccccacc attccccctt 300  
 ccaaaaattt gccacccta aagggcacaaat ggaaccccc ctttaccggc ccattaacct 360  
 cggcggtttt ggtggttacc c 381

<210> 7860  
 <211> 394  
 <212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-033-Q1-E1-E1

<400>      7860

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atgcattgcc ctttctcacc tcgagagttg gttcaaactt cgccggtgca tccaaacccc  180
gtgatatgat atgctcacac ataagcctta ttatatcttc ctcaaaacag ctaccatacc  240
tacctatcat ggcatttcca tagccattcc gagatatatt gccatgcaac ttccatcatc  300
atcatataca tgactcgagc attcattatc atattgcttt gcatgatcgt aagatagcta  360
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<210>      7861

<211>      432

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-033-Q1-E1-E10

<400>      7861

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tccaagttgg agacgctgga aaacgatgat gatccggacg gtgccgaact gagctccatc  120
aatcctcacc cggagagcgg cgaggaggcg gggccaggcg acgtggcgaa agacctgagc  180
aagatcaaga ggcagaacat gatcaccac atcctgctcg gcacggtgat ggtgatgatc  240
gccgcgtggc agttcaacga ggtgtcgttc ctccctcgcg tgcagaagaa gctgaccaac  300
cctttcaagt ccgtcgggga catggtcaag agtaccctca agatagggaa gaagccggtg  360
gtcgaggcga tcgaggcgtc gcctctgccc cctgtcggcg tcccgacgt tggtcgggct  420
gatctgccga tg                                                    432
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<210>      7862

<211>      433

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-033-Q1-E1-E11

<400> 7862

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cgggagcgag tacaggtcga tctgggtgta cgtgggtggg ccggtggccg gagccgtggc 180  
cggggcggtgg gcgtaacaacc tcatccgctt caccaacaag cccctgcgcg agatcaccaa 240  
gagcacctcc ttcctcagga gcatgagcag gatgaactcc gtctccgtct gattccttat 300  
cactagcaac gttgtattac tactacaagg ctatgtaatt gtcgtcatcg tggccatata 360  
tccatggcgt atcgagtggg ctacactcta ctctctagt ggtcttggcc taactgaacc 420  
tgccagagta tgt 433

<210> 7863

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-E12

<400> 7863

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gcccataaac caccttgccc gctttgcacg cgagctcccg atagtgaagg atgtgtatca 180  
ttctcggagc ctcttcacgc cgccctcaga tccgctcgca ggaatcatgg cattcgcttt 240  
tcttctggtg atgcgggtgg tagcagcagc agcgcaaacc cttctcgcaa cgaccatgtg 300  
ctgaagagaa atcagtctgc gctcgcgcca gcgcgcagcg gctcgtgtt ccggaaccgt 360  
ttcaagaagc agttcccctt caaggggagg ctcggaagg acctgtttgg tggcaagggt 420  
ttc 423

<210> 7864

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-E2

<400> 7864



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 gacgattacg gctccagggc gctgggttctt aggggcaggt acacgaagac ttcccaacta 180  
 ttatcgacaa ggtcaagttg actccgtag gtaagtggcg acaacagctc gttcagacga 240  
 tggtagtggg cgttcgatgg tctcgaaatc tcgatgcatt tttattatta tgctttgggt 300  
 gctttgtact tctggagaac tttggtaatg atctggatca ttttcccaa aaaatgcacg 360  
 tgaaatgcta cttatattct atagatactt acaagtatat aataatcata tatgataaat 420  
 cataatatgt gtt 433

<210> 7865  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-E3  
 <400> 7865

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 tggccacgta tttcgaccg gaccgtcagt cgaacgtaga ctacacaaat gtcaagaagg 120  
 ttcttgatga tgttctcccc ggctacgcca aatctggagg caccttcacc aggcctattc 180  
 gtaagtacgg caagcacgtg ttctcccaca atacgacgtt ctgctgcgtc aagcagccgc 240  
 ctggcgggtca gaagggtgcc tactacgcca tccatcacat gcgggcgatc gtacgggacc 300  
 atcatcaact tctgctaccg agtaaactcc aagattgggc cgcgagcgtg tcggcaatcc 360  
 aggacgcgga cctccgacaa gaattctttc gcatccagtc ggagtttgcg gaaatcatcc 420  
 atcaa 425

<210> 7866  
 <211> 270  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-E5  
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tcattttttt gtgtaataag gaggcacttc cttgcgtgcg aagatgtagc tgggtgggtcc 120  
aagctgtcag tggcggtaat gtttttttcg caaaatacag aagccctttc cgtgggtccc 180  
agatgtcaag ttgaagaatc attaatgtgc gcctaataag gaagcaattc cttgccttcc 240  
ggcaatggac caactgtcaa cctccccaag 270

<210> 7867  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-033-Q1-E1-E7  
<400> 7867

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aagccagaat gcccaaacta taggtttcag ggttatagg gattgtcaac agtgatttct 120  
ataaatcttg tttgagcatt agatttggtg ctgccttttt tttagccgtg acacatttgc 180  
acatcgcatg ttcctatctt acaattggca accaggtgtc taagtggcat ataggaatat 240  
atcaggcagc gtgtatgttc agttaaact tagcccgta ttggaatgat tgatgtcata 300  
ttgcacattt tccacaatta aaaaaaaga aacaaaaat gaaaggagaa gacagaaatt 360  
agagaccaa aaatagaata aaaggcaat aaaaaatag gcccgctcta aag 413

<210> 7868  
<211> 401  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-033-Q1-E1-E8  
<400> 7868

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tgaagatgca cttcgtcggc acctccttcc cgccagctcg agcgaggat cgggttgacg 120  
ccagccgcgc gccctgctat tcgtcataca acgactacga gtacgcggcg gagtggaacg 180  
ctgtggttcc ggcgacggcg gcggccgtgg aggaggaggt ggtggagggtg tgcgacgaca 240  
cggcggagtg cgggtacctg tggtggctgg aggaggagag gtcgtcgggt gccgtgccgg 300  
cgggcgagga cgacggcgcc gaggctagtc cggcggtgaa cgagatcgac aggctggcgg 360

agaagttcat cgcgagggtc cacgcgaagt tcttgctgga g

401

<210> 7869

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F1

<400> 7869

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cttatatttg gtacagatat ttctggaggt taaactactc taaaaaacgt cttatatattg 120

gtaaggaagg agtatacata aagccactag cccactgcgt ataaatgcac tgttcaagtt 180

caatagatag actatcgcta ctcatcaaac cattctgccc cctctttatc tatagcaaag 240

taactaaacc ataactgatg ataatggcaa ttctgaagtt gacagacaca cataaatgtg 300

tggttatgct tgtataagaa aaccgagtca tccggttaac aagagaaaaa ctgaattaaa 360

gaccacacga caacagattg gctaactagc ataaggagca tcctctgtcg c 411

<210> 7870

<211> 64

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F10

<400> 7870

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<210> 7871

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F12

<400> 7871

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gagcaaccta gatccattta gtagaagcca gataaacaag actcgaagaa gtgaattcaa 180  
aaggagaaat ataaaaacag gctccaaggt gagaacaccc acttcctaca tcaagctaaa 240  
aacgaaagca ttaggatgat taagactctt cttattacac atcgaagaac atgaggctaa 300  
gagaaacaaa aactacaaca tatacacatc gaagaacacg aggttaaattg aaagtaattg 360  
aaaggggtgtt acttaccaaa gctcgtttta cagggttcggt gcagctcctc tccaacttgc 420  
cactttc 427

<210> 7872  
<211> 416  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F5

<400> 7872

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caacacggat cacaccattg cggcgaacaa catcctgagc gcgatgcact agcaatctgt 180  
cacgcctgag gatcaaagga tcttgtgatt aagtagaagt aggtaactca cacgcattgt 240  
cgagtcgatg gatcttctac aattggcttg gactttgtct ttgttatgcc gccccatatg 300  
cttcctagcc atacgtacac tttcgtacgg ttgttcaatt gttttcttcc gggtgttacg 360  
gagtccaaac tagctttcgg catcaacaat gtctgactga cgtgccttac ggtaaa 416

<210> 7873  
<211> 357  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F7

<400> 7873

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gaaaatcggt acgcccgtc ataattcctt tttcgtatgct ctggagaata ataactactg 180  
gtatatcatt ctatatatca aggccggctt gtgaaataaa tgatcctgcg ccccggtttt 240

tgtgtcgtcg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa atagaaagga aaaaagaaaa 300  
 aaaccaaaaa aaaaaaaaaa aggaacggta aaaagaaata attatgcttc aagcaga 357

<210> 7874  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F8

<400> 7874

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 accacttttg gcagagggtc tgaaccaagg caaaaatgat gggcatttta gaagggcatt 180  
 tcaggttcat tgaaaaatta ttttagtaac cctagttggg ttccagagggg actggggggtt 240  
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 tgactagcta ggggtgtgaca tcagcggaac cccaggccgc ccggatagat gcacggccct 360  
 ggagccaccc tgagatcagc cccaggcgcc ccaacgctgc gcgaaagtcc aggcc 415

<210> 7875  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-F9

<400> 7875

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 atgcaagaga taaacatatc accttattga tgaatgctgg tctcctgaca cgccaactaa 180  
 tagatccaaa catgtactgg ttttctattc caagtattgg tcctatcttg aaaggcctat 240  
 cccagggggag gaaggaagtt ctttcattac tgggcccgtc gaagtacaag gagatgctac 300  
 tatcttcact ggagaagacg aggttgaggt tatcacctct cgacgtgcgg ttccacctcc 360  
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 gca 423

<210> 7876  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-033-Q1-E1-G1  
 <400> 7876

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 ctggtgatga tgaaaagttg cgagaacttt ttgctgagtt cggaactatt acttcctgca 180  
 aggttatgcg tgattcaa at ggcgcaagca gaggttctgg atttgttgct tttaaatccg 240  
 ctgatgatgc ttcccgagct cttgctgaaa tgaacaacaa gatgggtggc aataaaccac 300  
 tttatgttgc actcgcacag cgcaaggaag acaggaaagc taggctgcag gcacagtttt 360  
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 ctggtgtttc agtcggtc 438

<210> 7877  
 <211> 281  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-G11  
 <400> 7877

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 gtggtgttcg tccgacgaag gcttcaggtg agcgcgcaa ggaggtgaga tgccaggatg 180  
 ccgtgtgagg cggcgagcac ggcgagatgc cgatggtgct gccttagaag cggcaagacg 240  
 tatcagaagc tggaaccgtt atggactgca tcaaattggg t 281

<210> 7878  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-G3

<400> 7878

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gtgggtcaac ggctgggcgt ctacaccgcc atggactacg ccgacatcct cgacttcctg 180  
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gcgaagcagt taccggttgt tcctttcagc tggatccatg gccggcaagt gcaactttga 360  
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c 421

<210> 7879

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-G4

<400> 7879

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acctacatct ttgcagcctg cgtgctgtcg ctcaaggacg gcttccgctc gccgcctcgg 180  
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agcctgggtgt tcgcctacaa caccggcatg ctgccggaga ttcaggccac cgtgcaggcg 300  
cccgtgggtga agaacattga gaaggcgctg tggttccagt tcaccgccgg ctccgtgccc 360  
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<210> 7880

<211> 454

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-G5

<400> 7880

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 tggctgtttt gaggaaggta tatggtgggt gtatgatacg ggcgaaaggt gcgcggtatt 180  
 agagaggcta gcaatggtgg aaggatggca aaaagtgcata ataatccatt gactcaacgt 240  
 tagtcataaa gaactcatat acttattgca aaaatctaga agttatcaaa gcaaagtatt 300  
 acgcgcatgc tcctaggggg atagattgggt aggaaaatac catcgctcgt ccccgaccgc 360  
 cactcattag gaagacaata aatacataaa ttatgctccg acttcatcac ataacggttc 420  
 atcatacgtg catgctatgg gaatcacaaa cttt 454

<210> 7881  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-G6

<400> 7881

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 ttgtcgcgac gggaatgaaa caacatttcc gaaacaaagg tcactttttt taattattca 180  
 ctttattata aaaagctcga taattaaacg actacgacat tgaaccctag gaaacatgac 240  
 cgacaccgat gaggcggag gttctcagtc ccaattaggt cgagcacacg cctacctcga 300  
 ctttctggcg gatcaggaga gacagcaagc tgggactgag actggcgctg atgacgacgg 360  
 tgggtggcgcc ggcgccgaca ctgatgccac caacgacacc gacactaaga ctggcgctga 420  
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<210> 7882  
 <211> 313  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-033-Q1-E1-G8

<400> 7882

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 ggttggtaca agtatttgta ggaagacgtc gtgtagcgtg gaggcgggcg attaaactgca 180  
 ctttctgatg atgcgcttcg atggtatgat tcacagattg tgtatatagg cgcccaggct 240  
 gctgccgaca cgatcggggg cacttacgtg tggtttctgc atggcatgca gctgatagtg 300  
 ctcgatggag tct 313

<210> 7883  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-G9

<400> 7883

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 gctacactac atatgcatgg gtatatgagt aaagaggcat atcagtggac tgaactgcag 180  
 aatgccggaa taagaggggg atagctagtc ctgtcgaaga ctaagcttct ggacatctcc 240  
 atcttgacgc atgtagaaga gagtaggttg aagtcctcca agtggcatcg catagcataa 300  
 tcctacccgg cggtccctc ctcgtcaccg cgtagagag cgatcaccgg gttgtatctg 360  
 gcacttgga ggggtgtattt tattcagtat ccagttctag ttgtcataag ctcaatgtac 420  
 aactccggg 429

<210> 7884  
 <211> 192  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H1

<400> 7884

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 aagttcgatt tgtaggcttt tattattatt atagtatgta gagatgagat ttttatgttt 120  
 tcatgtatat ttgttttggg atggggaggg aagatttgta gtgagtaatg tgatattgag 180  
 gattggtttt ag 192

<210> 7885  
 <211> 289  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-H11  
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 tcctgtcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ataaaaaaaa 240  
 aaaataaaaa aaaaaaataa acacatcaaa aaatcaaaaa gattacatt 289

<210> 7886  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-H12  
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 cagcggcgac ggcaagaagg acggcgacca caaggagaag aaggacaaga agaagaagaa 120  
 ggacaagaag cacggcgagg gccacaagga cgacgacggc cacggcagca gcagcagcga 180  
 cagcgacagc gactgagcca gctccggccc gcgctccggc agcgtgcagt gtaggcgaga 240  
 tcgatgatga aacttggga gaagtgtgac agacatatat gttgcagggt ttggagcgtg 300  
 tggtagcata tgtatgtaat gcgtgacatg cctcatggat cttgtgatgt ataataatta 360  
 gccggccgca ctgcactgaa cggtgcttgt tataat 396

<210> 7887  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-033-Q1-E1-H2  
 <400> 7887

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 ttttgagtat ggctttatag aatgcttcat gtacttcaact tatatcattt gaagtttga 180  
 ttgcctgttt ctctttacat agacaaccac cattttctaga atgctctttt gcttcgctta 240  
 tatttgtag agcacgggca tatcttttgt agaaagaatt aaactctctt gcttcactta 300  
 tatctatttg gagagatgac aggaattggt cattcacatg gttagtcata aaatcctaca 360  
 taaaacttgt agattactga atatgatatg tttgattcct tgcaatagtt ttgcgata 418

<210> 7888

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H3

<400> 7888

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 tagggggtcg tctcgtatgt agaggatcat gagcttcctc tactcaactt tagtttccac 180  
 tccttctaag attttagcaa tatcatctat tatattagta ctactactca gaagttttcg 240  
 gactggttcg tgtttacagt ttagtcaata ttgtgtgcat taacgctttc ttggatatgc 300  
 attttgattt gactggatta ccttaattta tcatgtgtgc taactctaaa gtctaaacta 360  
 tgaccatacg gttgccacat acctacgaag acatgaaatc ttcattcttg gtaaaatata 420  
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<210> 7889

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H4

<400> 7889

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tcagcaaaga atgagtatgc atcaaaagca gatgtccatg agcccgagat actagttgac 180  
cacagtgtct acctgccacc ttctccgagc catggcgatg agcacggcca gatttgccat 240  
ggagggtgttg tgctggcttc tcgagatgga aagatttgtt ttgagaatac agttgatgca 300  
aggcttgaag ttgttttccg caagaaattg ccagagatcc ggaagcttct tgttgcgga 360  
taatgcccac ttgtattttg gtgatggtac agctgtttct atgtaaaat 409

<210> 7890  
<211> 452  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H5

<400> 7890

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cagcattaag ctcgaggaga ctttcgatgt tcatacggta cacaacgacg acaatagttt 120  
tttttcgtaa ttaagcactt caactatttt aacgtgtatt ttcatcttt tccaattcga 180  
ctagcttatc ccattgctatg caagacgcca tgtcttggag aggatgggtt ttgaagacca 240  
tgaaagtatg gaaacaaaaa aattctccta aggacccatc atggtgtgga ttttcaagta 300  
aagttgtaca atgctgagag tgtaacccat tttggttgca aaaattcgga agcactttgc 360  
aagatgtatg gttttgatga gggatgctt gtcacatgg atcttggtga tcatacaatc 420  
cagcaagaca atatgggcat ttgggtcctt gt 452

<210> 7891  
<211> 400  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H6

<400> 7891

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ggaggacagc caaggatatgt agtatcctgt gtgaatattt aggaaagatg catggttcgt 120  
gctgacgaaa gtgtcatgaa ctgtattagg ggccacaacc gaggtggcag cccttaagaa 180  
ggcgttagcc aaggccgagg acaaagcggc caaggaacgc gcctcgcgcg agaagcggga 240

ggccccgggtc agcgagggtcc agcaagagct ccaggacgtc gtcgagaagt acgagtcctt 300  
 ggagcgtgat tctaagactc aagagccccga acttgccaag gcccgccaga gcacacgaga 360  
 tgcecgagaa aaagctcaga gcgccctcca agaaatccag 400

<210> 7892  
 <211> 355  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H8

<400> 7892

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 caaccgggcg cactaaggcg gatcgatgat cacctgtggg cttcagcggg ggcgcaaac 120  
 gatgcagtct gaggtactcc tgtagccgaa gtgatgtctc ttctacagtg tcaacttagg 180  
 ttcacttcac tggccttcga ttaacaatca tcctgtaagg gaaagctcta gcggtaaaca 240  
 tggtatccgc cgtctctcaa atcgccctat ctccaaccgg gttaacaccg aaaacgcccg 300  
 taacgatcgc acgtcttatt atttgcacac cgtgatgcga ggcttggact ctcca 355

<210> 7893  
 <211> 350  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-033-Q1-E1-H9

<400> 7893

ttcgcgggtc gacgggatga tccgagaggc cgacgtcgac ggggacggcc agatcaacta 60  
 cgaggagttc gtcaagggtga tgatggccaa gtgatccagc cgatgttcat gtcgggtggt 120  
 attattattt ttaccgggga ggaggaaatt gtgcattgca tattagtagt aaggaatgcg 180  
 gctctcgttt ccttgtctct gccccgaacc agaagaagcg tactagtaga cgtagttgct 240  
 gaagagcact catggaatcc tctcccctg ctgctaccct gtctctctcc cgtgtgtcat 300  
 tgaaacatct ttctttctgt gtgaatctgc aagacttggc cccttcgtga 350

<210> 7894  
 <211> 405  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-034-Q1-E1-A11

<400>       7894

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aatgttagag ctaatcttga tatttgtatt agcatgtttg agttttgcat gtagtctagt   120  
ctagtgtggt gttcgtccga cgaaggtttc aggtgagcgc gccaaaggagg tgagatgcca   180  
ggatgccgtg tgaggcggcg agcacggcga gatgccgatg gtgctgctg agaagcggca   240  
agacgtatca gaggctggag ccgtgatgga ctgcatcaaa ttgggtcggg tgaaccggcc   300  
ggtcgttctg tttgttggac tagctgttca tgcgtgagtt cgtttagtcc tagctgagag   360  
tatcgttgct agtagttgat gcatgcatgt agttggcctg gtcac                   405

<210>       7895

<211>       411

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-034-Q1-E1-A2

<400>       7895

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ccgatttcca ctgctctaaa taggggtagg ttactaactt caattagacg tgacacgacc   120  
gcctctgagc ccattccgac actatgggcg tcaaacatgg gcggaaaaac acatttgatt   180  
caagctcgtc tgaaagacct atgtttctcc ctccagtccc cattcataca cgggtgggcgg   240  
cataacacac tcgactcggc agaaattgat gtacgcaa attttcaata ggggcagggt   300  
tgtaacttca ctcacacgtg atacaagcgc cctacctgtc agcctcgttc atacactgtg   360  
ggcgccaaac accctctcct cgcccgaat ccctctgggc aaatattggc g                   411

<210>       7896

<211>       419

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-034-Q1-E1-A3

<400>       7896

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ctccgacacc gtttacatgt tacgacacgt ccgaccattt atcacctatt ttcacgaga 180  
aaactctaga aatgcaaaaa aaattaaaaa atctaaacaa ctctgcattt ccttaccaag 240  
aaaactctag aaaaatacga aacttggtga aaacaaaaac aatttgatcat ggtgccttga 300  
attgttcata cgaggccatg aaaaaatta ggaaattttc aaggatgtca aaaactgacg 360  
tgctctctaa cacacccttt ctggccaacc tgaacacctt ccgttgaaca tgatgtttt 419

<210> 7897

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-A5

<400> 7897

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ttgccctagt ttctccggac aacccttccc caaaaatat gttttatttt atgtgttatc 180  
tagaatagca tctaccagta ttctcatctc cggttggttg agtaaccgtt gggcctagga 240  
ataaaaggcc cattggcctg ttccgggttg gccatcccat atgactccac atcatgagaa 300  
aatcactagt taagaggat cccttgcaaa agttactctc aaactccact cagacaaca 360  
agtttgtcaa aacttatcga catggtgttg ataggttttg atgaacttta atttttgaag 420  
aaactttaat 430

<210> 7898

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-B1

<400> 7898

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gtcgggcccc tgcaacctct ccatcatcat ccggctggac ggcaacctcc tgtgcaccg 120

cgacctcacc gcctacaaga agaactggat cgaggtgatg cgcgtaggaca acttcgccat 180  
 caacggccac ggcattcatg acggccaggg cccctcgtg tgggagaaga accagtgcag 240  
 caagcactac gactgcaaga tcttcccaa cagcctgggtg ctggactacg tgaacaacgc 300  
 gacgatccgt ggcattcacg tcaagaacgc aaagttcttc cacctcaacc tcttcaactg 360  
 caagtcggtg ctggtggaga acgtggagat caccgcgttg gggaacaacc ccaac 415

<210> 7899  
 <211> 457  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-B10

<400> 7899

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 ttttcaatgg tctcgaagag agaaatttcc catttttatac tatggagtca caaccgaggt 180  
 cgtggtaaat ccatgaattt gattcgattt gtttttctta tactatttgt ttttcttata 240  
 ctatagaaat agaaataaat tttatttctt tcttatacta tagaaagaaa taaacctttg 300  
 aattcagcat tattccaaga ctctatttc aaagtctatc ttttaaggga aaaatgaaaa 360  
 taaaagtaac ccttcttttc ccattccctc tctattgcat ggggtggaaga actaaaatag 420  
 aggattctga aaaaaaagga ccttcgaaat ccaattt 457

<210> 7900  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-B11

<400> 7900

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 ttgccgaagg aaacaataaa agttgcttct tcccaccagc cagacaggca gctgcagccc 180  
 gttctgcaca aaccgaaggc gcctgtagtc tctccctca tcaaacagca gcagtcaagc 240



accttggcga aagaagagcc ttgttcctct ggcaggaaga ctgaaaaaaa taccagaggt 300  
 taagcagtca aagtctgac gtaagaagag ccgcaaggct gagaaggaag agaagaaaga 360  
 gaggaattc cgagatcttt ttgttacctg gaat 394

<210> 7901  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-B3  
 <400> 7901

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 gggagccgac gcccagctca cggaggtgct ggacttcggt gtggtggatg aggatgtgga 120  
 gaagtccagg gactgggagt ggaagtggag ctgcaacgag tgcaaggcgg accccaccgc 180  
 gccggcagga ctcgtcgcca agaacaagga gttcgacaag atcatggata tcatacctgc 240  
 catcatcaag caagcagtcg ccggcgcgga caattccacc aaatcggaca ccaaattcaa 300  
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 atttctattg cgccatcccg tctgaccac accagcaggg tgt 403

<210> 7902  
 <211> 382  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-B4  
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 acctactcaa gttgctagcc atgctcagaa gtatttcatt cgccaaacaa atgttaatag 180  
 gagaaagaga agatcaagcc tcttcgatat ggttattgag gatcctagtg accagccact 240  
 ctcccgttca tcgtcacaag agatgccgct ctcccgttca tcttcacaag atgtagaaga 300  
 gttcgtagat gatctacgac ctgttactgc tctgtgaca ccaccgctc ctatgcccggt 360  
 gataacatct gtttctgtcc ca 382

<210> 7903  
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 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-B8  
  
 <400> 7903  
  
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 taattccttt ttcgacgctc tggagaataa taactactgg tatatcattc tatatcaaag 180  
 ccggcttgtg aaataaatga tccgccgtct tgccttcaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaatacataa g 271

<210> 7904  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-C1  
  
 <400> 7904  
  
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 tgttaaaaaa aaaaagaaaa aacaaagaga aaaagaaacc acaccgccta aaaaagcaaa 120  
 atagatcaaa gagacgtcac atagacaaca tcaccatcaa cggaaacaga aataaacaac 180  
 ggacattgca ccctcattat aggataacaa ccacgtgcaa caaacactac gactccaaca 240  
 taatcccaaa caaactaaat gccggagtac gctaacaaac ctaacattca tggcaacacc 300  
 ctcaataacg caaaattcta ccacctaac etc 333

<210> 7905  
 <211> 339  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-C11  
  
 <400> 7905  
  
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cagatggccc ttgtacaatc atcagaagca gagaattccg cgtggtggag cgcgtcgtgc 120  
gcgaggaatc cggggcatcc atgatgcaca cccgcaccaa attaccaaaa gtgggcgctt 180  
gtcatgcaag tcaagcggca agtcgctcgt gtctagaaaa cggatgatcaa agatggcgcc 240  
gaccagaacg actaccggcg cgcactgcag cttattctca ccggcactcg caagaaattc 300  
aaataaatgt gttgaagatc atcaaaggaa ggaaaaaga 339

<210> 7906  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-C12

<400> 7906

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cgtagcagga gtcgtagcac tagccctgat gattacaaga ggcgtggcag agacagaagt 180  
cctagtcgta gcaggagccg cagctacagc cctgatgatg acaggaaggg tggcagagac 240  
agtttgtcgc ctgcacgcag aagcactagt cgctcccctc gcaagacacc acctcctcgc 300  
gaggggtctc ctgctaagcg caatgatgat cgatctcctg ctaagcgcaa tgatgaccgt 360  
tctcctgtta ggcgcaatga tgaccgttct cctgttaggc gcaatgatga ccgttcccct 420  
gttaagccca attattaccg gt 442

<210> 7907  
<211> 195  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-C2

<400> 7907

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ctcgtgtggg ataacaacca ctgccacaag cactacgact gcaagatctt ccccaacagc 180  
ctggtgctgg accac 195

<210> 7908  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-C3  
  
 <400> 7908

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 ctatgcttgc ctctccagat attaagttca tgacaaacag agtaatgcat gaagtatgat 180  
 gacataatgt atacagaata aaaccaagca atatgattaa accatgtcgt tttcccccta 240  
 gtagcaacaa tacaaatacg tgccttgta cccctcctgt catagagtga ggacaccgca 300  
 agattgaact tattagaaag cacctctccc cctgaagata aatcaatcta gttggccaaa 360  
 ccaaacggat ggatcggaga gaaatgcaaa gctataacaa ttacacataa taaagttaaa 420  
 aaaagac 427

<210> 7909  
 <211> 314  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-034-Q1-E1-C4  
  
 <400> 7909

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 gtataaattt gaaattcaga acaccctctc aaacatgac agatctcata aagctcacat 120  
 cacgtcacia cggaatggac acgcgcgtac acgggtcgat cggtcgacct gacctggatt 180  
 gccgctgccg ttaacgctgc acacattgtc gatgttccac atgttttact actattttct 240  
 ttcgaatcgt ctcatctttt tgtttagcgg tgagatgtgt atattaccgg gtcctgggaa 300  
 ggggaggtga attg 314

<210> 7910  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-C9

<400> 7910

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cgttttaaga tatttggttg tcttgtaatc ggatatatta tgcgctccag aacatctgag 180  
atgtactaaa cttgagccta aataactggt tgctgtcaaa aaaaaaaaaa aaaaaaaaaa 240  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaactaaa aaaaaaaaaa aaaagaaaaa aaaaaaaccc aaaaaaaaaa acaaaaaaca 360  
aaaaaaaaaa ggggcgcccc aaaa 384

<210> 7911

<211> 458

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-034-Q1-E1-D12

<400> 7911

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gcactgcaga gagagaatgt ttttctgag agacctgac aaccggaatg catatactac 180  
ataaagactg gagattgtaa atttggtgca gtttgcaa atccatcatcc ccgtgtgcgt 240  
tcacagcctc cccagactg tatcttgagc ccaatgggtc ttccattacg cccaggggaa 300  
gagctctgca agttctattc tcgctatggc atctgcaagt tcggcgtaaa ctgcaagttc 360  
ggccacccga tggcggctcc gatgggggtc tacgcgtacg gctactccgc ctggcgtcgc 420  
cccaacgcgc ccatgggccc gcgtctcctg gagtcccc 458

<210> 7912

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-D3

<400> 7912

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 agcgggctgt tgagtattta tattctggta ttcctgagcc gatggagatt cctgcaccac 180  
 caccaagtgc ccagccagct gatcctgccc tggcttcaca agcagctcaa cctgcagttg 240  
 cctcttccgg tcctaacgct agccccttgg acctcttccc tcaagccctg ccaaattgctt 300  
 cagcaaatgc tgctggtgaa ggaaatctgg atgttttgcg taacaatgca caattccgaa 360  
 gcttactttc tttagtgcag gccaacctc aaatcttaca gccattgctt caagagctgg 420  
 gaaagcaaaa ccctc 435

<210> 7913  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-D4  
 <400> 7913

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 gtctattttac catgtatgat gctattttcc aaagggtttt gatgctgcat gtgaaagttg 180  
 gtgctgttgt gtaatggcgt aattgagtgc cgaagctagc tgatgtaatt caattatgaa 240  
 atcctggttg cttgtatatg gatatgaaat atctggcatg ttttataaga aatatcagtt 300  
 tgattagtag atggattatc aataataggc taattaccct gcatagtggg gttttctatt 360  
 gcacgcggtt actt 374

<210> 7914  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-D7  
 <400> 7914

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gtaagtaaag aatatgtaaa attattatcg catagatagt aacccatgat gctctgttcg 180  
gcgttcagaa agaaaagccg aatagaggat ctaataatcg cgggagtcta acataatcaa 240  
gtcaatatgt gtacgcaggc ttcgctgctg gcctctgctg cactgactgc ggaggtggat 300  
acgctgtagc agaaccttaa gcggtccgag caagagctcg tcctagccaa gcagcagctc 360  
gaggagaagg atggtaagaa ataccttatt gaaatatgtg aaaggtgcaa ttgcaaaaag 420  
tgacaggatt aacgcgggta ttg 443

<210> 7915  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-034-Q1-E1-E11  
<400> 7915

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cgacaccttg tggttcgagg accgtgttta tgtgccaaac aatgcagaga tcaggaagtt 180  
gatacttcag gaagcccatg agtcgccata ctcggtacac ctcggaaca ccaagatgta 240  
tttggatttg aaggatcggt tctagtggac tggaatgaag aaggatattg ccgagtatgt 300  
agccgtatgt gatgcatgtc agagagtga ggcagaacat cagaagcctg caggattact 360  
gcagcctatg cccatacccg aatggaagtg ggataagctt ggcatgggtt ttatcaccgg 420  
a 421

<210> 7916  
<211> 405  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-E3  
<400> 7916

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ccggtgggca tattttcatc agggagtcct gcttccacca gtctggggat tccaagagga 120

aagtgaaccc gacgcactac cgggagccaa ggttttacac caaggtgttt aaggaatgcc 180  
 actcctatga ccaagatggg aattcctttg agctttctct ggtaacttcc aagtgcattg 240  
 gagcttatgt gaagagcaag aagaaccaga accagatatg ttggctatgg gagaagggtca 300  
 agtgcacaga agacaaaggc tttcagagat tcttggacaa tgtgcagtac aaatccactg 360  
 gaatcctgcg ttatgagcgc gtgtttgggg agggttatgt cagca 405

<210> 7917  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-E4

<400> 7917

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 acacgccccaa ggccaaggag attgtggaga aggcgtgcgt ggggaagagg agctgtgtgc 180  
 tggccgtgtc gcacgaggtg tacggcgggg acctcaactg cccgggcacc acggccacgc 240  
 tggccgtgca ggcaaagtgc tccaagaggc agaggaccgc cgagcaataa gtaagctaag 300  
 ctcagatatg tactgctatg tagatcatct catcaccttc acctttgccg accatggtct 360  
 ttttcatgct gcttgttt 378

<210> 7918  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-F1

<400> 7918

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 gtcatgccct cgtcaaggag gaggaggact ctgactaagc gtgggcatg ccggagccgg 180  
 gcttaaggaa cagcgccct cgggaggccc ctcccgttgt ttgttttttg tttcctgcat 240  
 taagagtcac gaagagcccc atggggcgtg taatgaactg tggcgcttgc acctttatat 300



cagtgtttcc cgcccatatt ctaggattta cattgttact aattgaaagg ttcctgcctg 360  
 gcgcgattag gataacttag cttggtgcgc ctgtgaccct tggcgggtcc ctgcgtcaag 420  
 ggggcgcgct cctccgga 439

<210> 7919  
 <211> 388  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-F11  
 <400> 7919

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 gttcagctag aggaagacga aggcgtttcg atcagtcga tctcctgctc cttttacatg 120  
 atgattacta ttatcttaat cttagtgcac gtgtatgtaa tatgcacat gaattggtag 180  
 tgcagcgcag tgcagcacag cacatctctg aacctgggaa ggtactacta gctttctttt 240  
 cactcagaca agtcgggagg gggtttcttg tcagttagtc ggtttctggc ttgtcagtag 300  
 ctgtggtgcg tgtcgtgtgg atcgagttag ttgtactacc agaaattcgg aatgacatgg 360  
 aaaccatgca tagcatagca aaataaaa 388

<210> 7920  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-F12  
 <400> 7920

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 gggtttatgg tgccggcgaa agttgcacga tactagagag gctagcaatg gtggaagggt 120  
 gagagggcgt ataatccatg gactcaacat tagtcataaa gaactcacat acttattcca 180  
 aaaatctatt agtcacgaa acaaagtact acacgcatgc tcctaggggg atagattggt 240  
 aggagaagac catcactcgt ccccgaccgc cactcataag gaagacaatc aataaataaa 300  
 taaatcatgc tctgacttcg ttacataaca gttcaccata cgtgcatgct acgggaatca 360  
 caaacctcaa cacaagttat tatacaatcc acaactactc a 401

<210> 7921  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-F2

<400> 7921

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cccatctgca aggcgcaact ggccaacgag aagcagttga ttgatcacta tggatcaaag  120
catcccaagg agaaacctcc aggtccatca aatgcagagt gactgatgcg aagtggaagc  180
atgagctata ctttgccctgt ttctgagggt gttcaatctg ctccacactt ggacgacttg  240
agcctcagct ttaccctatg taatgcatgc atttccactt gttccaggca agagcctttg  300
atgaccatgt atttgccctc tatgagtatc tttgtccaac tgtcaacata ctttcaaact  360
gtatgtgggtg caatcttttg ataagagaat gctaaacttt tttccaaaaa aaaaaagtaa  420
ggggg                                           425
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<210> 7922  
 <211> 353  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-F4

<400> 7922

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ccctcaaaaa aaaacaatag tgagtgtaca tggatttgaa ccatgggttg gaggactcat  120
gaaccaactc atccaaccaa agattctgca gaaagagagg gagcttaaac cgtctcgcca  180
tatagggtggc attcatttac gttttggaaa catccatcat gtacgattcg ttttttcaaa  240
cctcctccct atatgtatgt tgtggaccac agttgcgggc gtgttgcgcc aagggttgga  300
gctccagcgg aaagaacggg agatggggct actagaggcc gttatccggg aaa           353
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<210> 7923  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-G10

<400> 7923

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tgagtcgatc ccggaacagg agccatgcaa agatcttcgc gtgatttggga acgcgtgaag 120  
accagatggc aatggcatgc atgtcgtcgt cgtcatcgtg ggagcccatg gtttagcgcgt 180  
atgctgccct cgtggagatt catcatcacc acccttgatg tctctcccgt ctccaccttt 240  
caccttggca ccaacaccca acatcaccca cgcagtaatc catctatagt tctgcacaca 300  
aaggccgggg aaaagacagg cacaacagct acgagctcat gcacaggatc atagtctggc 360  
atgaatttca cctgattttg ttcacgcgaa tgatgcaaca gtacttggtg gatcgtgggtg 420  
aactgtatat ttaattttct cctcaagg 448

<210> 7924

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-G11

<400> 7924

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aaacatacac tagtagaaca tagggctttc gttcggggcca aataagcccc ttagtcccgg 120  
ttcagtcatg aaccgagacc aatgggggca ttgggtccggg ttcgtgaggc taaaggcatt 180  
agtcccgggtt caaatgggac ctttagtccc ggtttgagac acgaaccggg actaaagggt 240  
gcgatgccct ttagtcccgg ttcatacctc aaatcgggac taaagattag acctttagtc 300  
ccgtaggcct gtttgcaa at tctagaatc ctcaaattct aaaaggaaaa aaagttatgc 360  
tcaaaatttc atttttatta aaaaaatttg gttaaactctg gtcaaactaa ttattcaag 419

<210> 7925

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-G12

<400> 7925

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 cttctcaatg acttgggaga tgatgaaaag atgaaggaat ctggatttat agttcctcaa 120  
 aatgtacctg ctcacagctg gctgaagcgt ggggtagatc ctctccaaa ccgttatggc 180  
 ataaaaccag gccgtcattg ggatggagtg gaccgcagca atggatacga gaaggacatg 240  
 tacaagctaa agaatgacaa gcaggccacg gagcaggagg cctacctttg gtccgtcgca 300  
 gatatgtgag cgccgcagct gtccaagaa catgtccgat ggcatgctga ctggatcagt 360  
 tgctgaggtt gcccaatgtg cctgaaagga aaggaagcga tgcccttgaa catcatttct 420  
 tcgaacacat gatgac 436

<210> 7926  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-G4  
 <400> 7926

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 caagtacatg agttcttttg actaatgttg agtccatgga ttatacgcac ctcaaccttc 180  
 caccattgcg agcctctctt gtgccgcaca actttcgctg gtactataca cccagcatat 240  
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 tata 304

<210> 7927  
 <211> 313  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-034-Q1-E1-H1  
 <400> 7927

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 gctgtgctca tctctgctct tcctgacggc accgttgctg tttcaccata gaaggaatac 120  
 caccacaagg tggatgagat aaccatatgg cactatcctc tgatcacact cactcttgac 180

actcaagcat tgaacatca gtagtttagc tcacctctga catcactgac ggtatccgcg 240  
aattttcctt ggaccctatc gtggaaaatg ctgtatcatc aaaaatgcta tagccaaagt 300  
ccaaaaattc atc 313

<210> 7928  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-H10  
<400> 7928

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gtgatgatgg agcgttgatt cccatggagg atgattctga tgacagtgag gatggtgatg 120  
attcctctga tgatagcgag gatagctctg atgaggagga agaagaaaca cccaagaagc 180  
aagagactgg gaagaagatg gcggttgaa gcgtgttgaa gaccctgtt actgacaaga 240  
aggccaagat tgcaacaccg tcaggccaga agacaggtga caagaaggga gctgtccatg 300  
tggcgactcc gcacccggcc aagaaggcgg gcaagacccc agcaaccagt gagaagtcgc 360  
ccaagtctgg agggctctgc gcgtgcaagt cgtgcagcaa gacattcaac agttagggcg 420  
ctctagct 428

<210> 7929  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-034-Q1-E1-H12  
<400> 7929

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aacgaggcca gcgggggccc gtctgtgccc cgcgcctgac tcatggacct cgagcccggc 120  
accatggact cgggtgcgtc cggcccttc ggccagatct tccgccccga caacttcgtc 180  
ttcggccagt ccggcgccgg caacaactgg gccaaagggtc actacaccga gggcgccgag 240  
ctcatcgact ccgtctctga cgtcgtccgc aaggaggccg agaactgcga ctgcctccag 300  
ggattccaag tttgccattc tttgggagga ggcactggat ctgggatggg cacccttctt 360

atttctaaga ttagggagga gtaccctgac cgaatgatgc tgaccttctc t 411

<210> 7930

<211> 291

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-H4

<400> 7930

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attacgacat agtaactaag aataaaccta cactatacaa taaaggattt aaggatatatt 120

gcatccactg ggcacgaag ttcgccactt gtgatcataa agtgcaacga agaagcagat 180

tacaaaaact tggcaccatt gcagcgtaat aaaataatac tgaaccgaga ccacttccaa 240

gatagttcaa gaaaggttag ccttgccggg gaactgctgt gcaagctgct g 291

<210> 7931

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-H8

<400> 7931

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gtcaagaaag gagggttgtc caagtactac gacggaaagt cccagtcgtt cgcgtgcatg 180

tccgaggtga ggtgcctgga ggacctgccc aagaagagcc cctacaagaa gatcaagtcg 240

tgcaggagca acatcgatct ggacgggaac cagaaagcct gccccgtacc tggttctcac 300

aacagcaaag gaatggccaa gccctctgga agctcttgcg cgaatctgat ggcccgaat 360

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<210> 7932

<211> 458

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-034-Q1-E1-H9

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tcgatgaaca caagaacagt ctgcgctcca aacacccgga gcagtgcgac gactggatta 180  
catgtgaaca cgtcaggact ttcagcagtt ggttggaac acgtctcaga ggtgacagca 240  
ctgtttgtga tgagctgtac ttgttgcca ggggaccatc ttcgactgta atgatttgga 300  
aaggatacga gataaatggg aatacathtt acatgattga ccaagatgaa aagagcacca 360  
acaaaaacag cgggtgtccgc tttgatgcag caacctacaa tggaaatgac acatattatg 420  
gttacatagc aaacatatgg gaacttgact aacgggta 458

<210> 7933

<211> 263

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-A12

<400> 7933

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aaataaaaag aaaaaaaaaa attaaaaaga aaaaaagaaa ataaacaaac ataaataaaa 120  
aaagaaataa catcaaaaaa agcgctgtc ttaaagtttc caaccttctt tacccttcca 180  
gacaatttca acctccgcaa aattttcccc acatattcat ttaagggacc ttctttttac 240  
aagctcttga tgggaaaacc ctg 263

<210> 7934

<211> 346

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-A2

<400> 7934

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atgcttgata attgttttga gatatggagg tagtgatatt aaagtcatgc tagttgggtg 120  
attatgaatt tacagaatgc ttctgttgaa ttagcaagtc tcatagcatg cacgtatggt 180

taaagttgtg taacaaattt gaaacatgaa gtgtacctgg cttgagcatc cttatgagtg 240  
 gcggtcaggg acgagcgatg gtcttttctt accaatctat ccccttagga gcatgcgtgt 300  
 agtacctgat ttttgagtac tttcaaattt ttgcaataag tatatg 346

<210> 7935  
 <211> 307  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-A3

<400> 7935

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 gtgctggggg tttgttgctg gggttttgtc gtcagatttc accagctcgt ttctttctcc 180  
 ggttctttgt ttctttcaca cggtaaatgc agctaccact cgattcttgg cgtttggtgt 240  
 ttgtaaagaa gatcgtagct tgtaagtaaa atcgtttgca gtgtaaaatg taaaaaggta 300  
 gcatggg 307

<210> 7936  
 <211> 345  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-A5

<400> 7936

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 agaaacgtgc gtttgcaatg attcgtttct cggtagatga atgtacaaat tatccaggac 180  
 atcctagttt ggtaggattt tttaagttcg agacgtttgc gtgacataga gattgctaca 240  
 gactgttctg tttttgacag attctatttt tcgtgtgttg tttgcttatt ttgatgcgtc 300  
 tatggctagt acgtaagggt aataaacata cagaacttgg aatac 345

<210> 7937  
 <211> 441  
 <212> DNA





<223> unsure at all n locations  
<223> Clone ID: LIB104-035-Q1-E1-B3

<400> 7939

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cgacagcagt gggtcgagcg acacgggctt ctgtccagcg acgccaagaa agaagcggta 180  
atgacggggcg ccgaccagtc tacgcgtatt atgggtcttac agtccaattt tgtgtttttc 240  
atatcaacat gattgtttta ccgtcaattt tctgaatatt gttagtgact aactattttcc 300  
taattttgtt tatttaggtt gaatgttgtt tcattcccca cgcggctgaa tccaactcgg 360  
tctttatcct gccttgagtc tctctctcat aactgaagcc acgaggtatt cgatttatcg 420  
gatttcgagc tacctgc 437

<210> 7940

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-C1

<400> 7940

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tctcatgcat gggggcggcc tacgggacgg ccaagagcgg ggtcgggggtg gcgtccatgg 180  
gggtcatgcg gccagagctc gtcataaagt ccatcgtgcc cgtcgtcatg gcgggtgtgc 240  
tcggaatcta cggcctcatc atcgccgtca tcatacagcac cgggattaac cccaaggcca 300  
agccctactt cctcttcgac ggctacgctc acctctctc cgggctcgcc tgtggcctcg 360  
cggggctcgc cgccggcatg gccattggca tt 392

<210> 7941

<211> 365

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-035-Q1-E1-C2

<400> 7941

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gcatcgatcat aaaaagggaa aggcaaagga taagtcgaag cgtcacacat acaaagaggc 120  
aactggcact gatgtggctt cagatatccg agaaaacggc aaggaagagg ctgtgatacg 180  
catcgcggaac gacggggaat gccgcaagag caacaaaggg aanggccgcc atgangacaa 240  
gaacaacgtg aatgtttcaa tcgtttccgg cagcatagag aacggtgctg gtgacgagca 300  
tgccaacaag tcgggctcaa tggcaatgaa cctcgttcg gaagggtcca ccgacaaaact 360  
caatg 365

<210> 7942

<211> 245

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-C5

<400> 7942

agcatcgagc gatagcacac ggatgtccag attgctcaga tcaacgacaa ccattatctc 60  
ctacggtaac tggaaccggt tcatcatatg caaactctac gacaacaccg caaccaagac 120  
ctacggtcag ttcatcatac cggcgtctt ctggatccat gctaagtctt cttacggttc 180  
agctcagatc acttcgaggt tgcttcctac agtctatcag cgggccttat attccactct 240  
tttaa 245

<210> 7943

<211> 201

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-D6

<400> 7943

cccggtgga caaggggatg ataaaggtag tgtatcatac ttgaaagatg aactgtacgt 60  
ggcttgatgca tcggtacaat tggcggtcgg cgacgagcta cggcatttca ttaacagtcc 120  
atgcctgat gagcatgccc gtcatacttg acttgggatg aattccagtg ttttgcata 180  
agtatagcat ttctctgggg g 201

<210> 7944  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-D7

<400> 7944

cggtcaggac ttcccgggcc gacgggtcct ttagagtacg aggtagtgtt attttgaata 60  
 aatagggtgaa ctctcatgct tcaattatat tattttgaga gtcttaaaca gcatggtaat 120  
 ttgctttggg tatgaattta gtcctaatat gataggcatc caagagggat ataataaaaa 180  
 ctttcatata agtgcattga atactatgag aagtttgatg cttgatgatt gttttgagat 240  
 atgaagatgg tgatattaga gtcattgctt ttgagtaatt ttgaatttga gaaataacttg 300  
 tggtgagggt tgcattgtcc gtagcatgca cgtaaggtaa ccgttggtgt acaaatttga 360  
 agcatgaggt gttctttgat tgccttcctt atgagtggca gttggggact agcgatggtc 420  
 ttttcctacc aatctattcc ccta 444

<210> 7945  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-E3

<400> 7945

gacgggacac taaaagtcaa aaggtgttac atcacctcaa cttggggcca ttggccttgt 60  
 acgacctaga tttagtttta ggctgccttg ggacgtcctc ccacatcctt ggccgccacc 120  
 ccttcctcct atataagtag atccatctag tagcttttcc ttgggatttg tttagttaaa 180  
 agttagccat tgcaacttcg tgtacttcgt ttgtgtccaa cgaccagacc aagaccgctt 240  
 ccggatcccc accattatca atacttcata tatattcgca atactcagat tgctttatca 300  
 tattcttgct cgttcttcga ttgcttgagc gaatagacct tcgtgggtcag gttgatcgtg 360  
 ctccagcgtg gtcaataacc tctcggagtt ggtttagcga ttgcaaaggc gcaacgtcgt 420  
 gcac 444

<210> 7946  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-E4

<400> 7946

attccaggcc gacgggtata tgcactagct taatggcttt aaagaaagcg ctgccaggga 60  
 gacaacccgg aagtttttagg gagtcattta tttctgttga gtgctttcat atagtttaaa 120  
 aacaacaaaa ataaagaggg gaacccaaaa ctttttcaaa aagaaaagcc aaagtgagaa 180  
 agacaagcaa tgtgtaaaat ggagagaccc ctgaaactgt gtacaggcac acaacaactt 240  
 tgagaaccga gataacagaa acttttcaac aaaaataatt acccccggtgt acaattccat 300  
 tgtattataa aaataatgtg ccagggtttg ctttttaggat gtttacattt gcttgatggt 360  
 ttgtacggtg caagacagaa actttggctg tantgcgcga ttttacattt ttagctggaa 420  
 cgtcaaattg ttctgattct ttttgcac 448

<210> 7947  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-035-Q1-E1-F7

<400> 7947

ggtcaggact tcccgggccc acgggaccgg cagccaccga gcctctgaag gacgagctct 60  
 gagcatcggc ctgtctagca gcagacaggt aaaggagggg gaaacatgtt ttggcaaggc 120  
 agcttccaac gccagatttt gcgagggggg gacgatagtt ggtcgttga tgtgttggcc 180  
 ccggttttgc ctgattctgt atcccgttgc gagaaatact gtaacaaatc cgtcagtggt 240  
 gtacctagtt aaattatctt caagtacag tagaaatggt tcgtggagag ctttggtaat 300  
 aaatggcgct tctgtgcttg gaaaagtac ctattccaac aagacacgaa ccggatgctc 360  
 aataggatat aggcacaca 379

<210> 7948  
 <211> 281  
 <212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-035-Q1-E1-G1

<400>      7948

ggtcgaggac cagcgatggt cttttcctac caatctaccc ccgtaagagc atgcgcgtag    60  
tgctttgggtt tttgatgact tctagatttt tgcaacaaat atatgagttc ttttgactaa   120  
tgttgagtcc atggattata cgcacctgac ccttccacca ttgcaaccct ctcttgtgcc   180  
gcagaacttt cgccggatag tagaacccca ccatatatct tctcaatac atgccaccat   240  
acctacctag tactgcattt tccatagcca ttctgagata t                            281

<210>      7949

<211>      344

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-035-Q1-E1-G11

<400>      7949

ggggatcact atgatgagtc ggattacgag gaagaagatg aagaggaacg acgatgacga    60  
cgaagtagta ttagtactcg atgaggatct agatttagat gacgagtctg acgacgaata   120  
cgaagatgat caggacgagg aggacgagga gtaagttcaa taactgtaag actactaacc   180  
tgatgaagca tattcagatg tcgaatacta acaccattca tatgcagacg attatgttta   240  
tgatgaacat gacttttgca tcaagggctc ttcacgggcc gttattagct gcctctcttt   300  
acgatcctag cttaccttcc ctttcttgcg atttcataac tctt                            344

<210>      7950

<211>      396

<212>      DNA

<213>      *Triticum aestivum*

<223>      unsure at all n locations

<223>      Clone ID: LIB104-035-Q1-E1-G4

<400>      7950

atccaaggcc gacgggactc tctacttttg cttcccaactg atattgtggt ggctgataat    60  
tttgctgcag atgctgagag caagattggt cctgcctctg ctattcctga tggttggatg   120  
ggtcttgacg tcggcccgga ttctatcaag aaattcagtg aaactttgga cactaccaag   180

actgtcatct ggaatgggcc gatgggagtt tttgaatttg agaagttcgc agctggcact 240  
 gatgcatcg cgaagaagtt ggctgatatc acagcaaaaa ggcgtgacaa ccatcatcgg 300  
 cgggtggcgac tctgttgctg ccgtcgagaa ggcanggttg gtgagtaaga tgagccacat 360  
 ttcaaccggg ggtggcgcaa gcctggagct gttgga 396

<210> 7951  
 <211> 449  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-G5  
 <400> 7951

ggtcaggact tcccgggccg acggggagca caagaaggac ggcgagcaca aggagggcat 60  
 gatggagaag atcaaggaca agatcagcgg cgacggccac ggcgacggca agaaggacgg 120  
 cgaccacaag gagaagaagg acaagaagaa gaagaaggac aagaagcacg gcgagggcca 180  
 caaggacgac gacggccacg gcagcagcag cagcgacagc gacagcgact gagccagctc 240  
 cggccgcgct cgggcagcag cgtgcagtgt aggcgagatc gatgaacgct tgggagaagt 300  
 gtggcataca tatatgttgc agggtttgga gcgtgtggta gcatatgtat gtaatgcgtg 360  
 acatgtctca tggatcttgt gatgtataat aattagccgg ctgcactgca ctgcacggtg 420  
 cttgtaataa taacgttaat gaatcatgt 449

<210> 7952  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-H1  
 <400> 7952

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 caacttgcatg aaaatgctca aaagggccat gcagagccaa aaccactgcc tagcttcaag 120  
 aattttgtcg tggaagagga ggaagggatc ggaggttatg ggatcgttta tagggctcgg 180  
 agaagcgaag atggaaaagt atttgccata aaatgtcctc gtgagaaagc tcattcacat 240

catgttgaca atgaacgaaa gatgttgga cgatttggag gcaagagttt tgtgattaga 300  
 tacgaaggct gttttaggag tggatgaacta gactgcttta ttctagaaca tgtaagcat 360  
 gacagaccag agattctcan nagagaaata atgtctttga gttgcagtgg tatgggtatt 420  
 gtctgttcaa agctctttca ag 442

<210> 7953  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-035-Q1-E1-H2  
 <400> 7953

ggccgacggg gtgtgtaagt gacatacatc tacatgctaa atagggtttt cacgaagaga 60  
 ttgttcatgc gagataaaga gcgatgtgcg ggccttgagg tgggtanggg ccaggtgagg 120  
 gtgtcaaaat gtgtgcattg atgcatgtgt tacatgcgat tgtgtgaggg acggacgaat 180  
 cgagagagat ggttgtttgt ttatggatgc tcctctctgt ctctctctct tgcacacaca 240  
 caagtacaaa tagaagaccg ttctctcatg tatacacaac gtatcgacat ctctctatgt 300  
 ctcaactcatg catgatcatt tgcacattca cacctctcta tgtctctatc acacacacag 360  
 tctccacatt gcccttccgc cacaacacac atatggacac atacacacgt tctctctcag 420  
 tcacacacac aaaatcagta tta 443

<210> 7954  
 <211> 301  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-035-Q1-E1-H3  
 <400> 7954

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 ccaaaacaag gttctcccc tctcttatgg aatcaattc gatgtaacc tttttgcggt 120  
 gtgtttgtcg agatccgatg aattttgggt taaggatcaa gtttacctat gagaaatatt 180  
 tgaatctcct ctgaattott taatgtatga ttgagttaaa tttgcaagtc cttttgaatt 240  
 atcagtttgt tttggcctac tatattgatc tttcttgcca tgggaaaagt gcttaccttt 300



<210> 7955  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-H4  
  
 <400> 7955

gacggggcaa ccactacatc aagccgccga acctggcggc gaagctgac acgaagcggc 60  
 tgtacgcgga ggaggcggag tggaagaact ggggtgtggca ctccgagggg gacctgatgc 120  
 tcaacgacgc cgtcttcgcc gacagcggcg gcccacaacca gaggaagttc gagaaggatg 180  
 acctcatccc gcccaagccg ggatcgtagc tcaccaggct cacgcgcttc gccggctgct 240  
 tgccgtgcaa gcccggaag ccctgctaaa ccttggtggc cccgcgggcc ggccggagcc 300  
 gatcccttcc gaatcttcaa ttctatagct ttgttcaatt cttttactca aagattcgtg 360  
 catgtattac taggacattt gagtagtcta cgggggttcag atcagagggc cctgtagggt 420  
 gtccttgtac gtgcattcgc cg 442

<210> 7956  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-H6  
  
 <400> 7956

ttcccgggcc gacgatatca tagacgcgtc ccgtccattt gctggatgac aactgcacga 60  
 acgctgggcc gacacgtgga tctgctagcg aatgagaatt ttacatgtgg aaaatcccca 120  
 ttggttcggg ctgttaatgg gttatcggat ccaaagtgga acccaatagc ttaacaacga 180  
 cccgttacga tggatgccac gtgtcggta cccttgacga aagcacttct atgacgcgtg 240  
 atttatcatc atggaagtgg acacttccgt tatgataatt ttggtaatgt catggaacac 300  
 ttctacgaca gcacaagtat gactatcttg atcctgtcat aaaatcgtca tggatttaca 360  
 tgcattgacag aaaacgtgac ctactgtgac aaacacgtat caacagggaa gtgtattttt 420  
 tgtagtgcac tgacatggta taggc 445

<210> 7957  
 <211> 345  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-H8  
  
 <400> 7957

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 actaaaataa taattattgt aagaatgtat acttgagca atagatatta aatgttacia 120  
 tgggtgtttct cacggttcct tttccaacat tatttgtgtg tgcattgtgtg ttttgtaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaataaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaaaa 240  
 aaaaaaaaaa accaaaaaaa aaacaaaaaa agaaaaaaaa aaacgggccc cccaaaaggt 300  
 tccaatctaa cttacccttg aatgcaattt aaaaccctc caaaa 345

<210> 7958  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-035-Q1-E1-H9  
  
 <400> 7958

tcgacggggc ctaacgtgta gtaatatgtt acttgtagt accaaatcaa ttcgcacttt 60  
 cctcaaccaa aaaaaaaaaa tgaaagcaat aagaggcaat ggatatcgtt tcgtcccaa 120  
 aggtgggaca ttccctaccg aaaaccatca tgcttgttgt gagaagctcc ggtttgtgag 180  
 aagcgtatac ccaaactgc cccaaatggg acaaaatttg taccacggca tgttgatgcc 240  
 gtcocatgat agcatgccaa gtttcttgaa tttcagatga cttttggatt tacttgaatt 300  
 taaaaaccag gcattctaat gttttgctgg caatcaacgg tgccctgggtg ttcgaaattc 360  
 attcccatth cttgcatggg acctaagcat gcaccaagg acacagattt ggthtttc 418

<210> 7959  
 <211> 196  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-A12

<400> 7959

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attataggaa gttcccaaacc agaattggtaa aggtttatac tcccccaacc accaacaagc 120  
atcaaaccaa ggcttgctcg aaacaacgag tgcttccaac taacaacagc cctgggggag 180  
ttttgtttta ttattt 196

<210> 7960

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-A2

<400> 7960

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atacctcgaa gagtccagca attgtcaatc tacttgagat catgacagaa ttactccgg 120  
agcaacaaca tgcattctgc cagtttgtga ctgggtgctcc tcggcttcca cctgggtggct 180  
tagcctccct aaatcctaag ctgactatcg ttaggaagca ctctctgact gcggcggaata 240  
cttcaaatgc agctggagca gcagagtctg cagatgatga tctgcctagt gtcatgactt 300  
gtgccaaacta tottaaactt ccgccatact cgacaaagga ggttatgcac aagaagctgc 360  
tttatgctat caacgaaggc caagggctcg ttgatctttc atagtgggtt caaaactaac 420  
atacagatgg ttggtgcaca tgt 443

<210> 7961

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-A3

<400> 7961

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actaagagga aggctaacc taaaaacata aatccttgaa gcccacact ccgttactag 120  
tttctacaa agctctctct ctctctctct ctctctcaac gctaacccta ccctccacac 180  
gaacgctctg ccttcaactgg acaagtccgc ctccgttgcc gctagctatt cttctagtgc 240

ccggaccggt gaccatccct tctctgataa tgtggaacag atatgttaga agctccaaaa 300  
attgaatgtg ttgcacgagc agcgagcacc acacttgtgc tagtgcagct tgtgggacgg 360  
gacagggatc cccgcaagaa taaattactc aataggtagc ggggacacgg acgagaatga 420  
gcagcggaca tagatgagtt 440

<210> 7962  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-A4  
<400> 7962

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gaggatgtga actccctgca gcccaaggaa ctgatcgcca ttgaggaagc tctcacgaac 120  
ggccagacca acctcaggga caagatgatg gaccactgga agatgcacag gaggaatgag 180  
aagatgctgg aggaggagca caagctgctg gctctgagga tgcaccagca ggacgacctg 240  
agcagcggca tgagggagat ggagctcggg taccatcagg gtagggattt cacttcccag 300  
atgccgttca ccttcgggct gcagcccagc caccccaact tgcaggaaga caagtaggcc 360  
accgaatcct gccacggcct gtgtcaactg aagctcctct acctgc 406

<210> 7963  
<211> 439  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-A5  
<400> 7963

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ggattctgga gaggcgacgg caggggtctc tgcttctctc cccggtctca attttttggc 120  
tcgagcagta gtttgtctac actccgattg atcgatcgat ccacacgacg cgccatgtgt 180  
atatgttacc cgcaccaacg tccctctctc ccaagtggac atagtgtgga gctcagctgt 240  
aaatatggtg ggacatttgt gcttcggcct cctgcaaaag ggatgagccg tgcggcagat 300  
gcgattgctg ttttttcac atcttcttct tctctctgtt ttagtttcaa tcaactggacg 360

tcaccatgtc tgacactctg accgaaactg tgaattgtca aaagaacgaa atttggcgga 420  
ctggtaaaat taatctggg 439

<210> 7964  
<211> 378  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-A9  
  
<400> 7964

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gaaggtttgg gtggcatggg tggatatggg ggtctggctg gtatgatggg tggaatgggc 120  
ggtatgggtg gtatgggcat gccgcctggg atggaagggt tgggtgggtat ggggatggat 180  
gattttgagg atgagagtga cgacgaagga gaagtgtcga aacctcaaga cgcaggggaag 240  
tctgatgctg cggaaatctc cgaggtggaa ggcaaagctg gcacagctgc tcagagcaac 300  
tgaaggcttt ctactcaata atccctactc gactgtatcc tagcgttttt ttatcaacgt 360  
gctaaactga aggacaca 378

<210> 7965  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-036-Q1-E1-B3  
  
<400> 7965

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taataaatct cagatgacaa cactttctca aaacaatcat gatataatat aacaagatgg 120  
tatctcgcta gccctttctg agaccgcaaa atataaatgc agagcacctt taaagatcaa 180  
ggactgacta aacgttgtaa ttcatggtaa aagagatcca atcatagtca taccgaatat 240  
aaattaatag taatggatgc aatgacagc ggtgctctca agctattgct ttttaataag 300  
aaagtgatga ctcgacataa aattaaataa ataggccctt cgcagacgga agcagggatt 360  
tgtanaggtg ctagagctca attttaaagc agagataaat aatattttga gcggcatacc 420

ttcattgtca acataacaac ccaag

445

<210> 7966  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-B4  
  
<400> 7966

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cttatgatgg tgaattgctt tctcatacta acggagctta cgagttttct gtttaactttt 120  
gtgtttgtgaa gttttcaagt tttgggtaaa gattcgatgg actatggaat aaggagtgga 180  
aagagactaa gcttggggat gccaaggca cccaaggta atattcaagt acaacaaaaa 240  
gcctaagctt ggggatgcc cggaaggcat cccctcttct gtcttcattc atcggttaact 300  
ttacttggag ctatattttt attcaccaca tgatatgtgt tttgcttgga gcgtcattct 360  
attttatttt gttttgcttg atgtttaaat aaaataccaa gatctgaaat tattaatat 418

<210> 7967  
<211> 409  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-B5  
  
<400> 7967

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catcgctcaa tctcaaccag ctatggaaga agttcaaggc cgacgagaca ccccttgcaa 120  
gtataggagc cagcagagac tacaatgtag acatgggttc aaagtttatg atggcaaatg 180  
gtgctttggt cegtgtactc attcactactg gtgttaccaa gtatttatcc tttaaagctg 240  
tggatggaag ctacgttttc aacaaggga agatccacaa agttccctca actgatatgg 300  
aagctctcaa gtctccattg atgggattgt ttgagaagcg aagagcaggg aaattcttcc 360  
tttatgttca agattacaag gaaaatgacc caagtactca caaggggct 409

<210> 7968  
<211> 393  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-036-Q1-E1-B6

<400>       7968

ctcgtgggtc gacatcaacc ccgatgataa gtcgaggtac cagaggcact ccgccaagtg   60  
gttcaccggc ttctctccgtg gggcgagct gaggccggtg gctctccccg gccaggcata   120  
ttcccagtga tcttggcaca cttcttcatg cttctgtagc acacggagag gaggatggac   180  
ggcgaataag cctgggaaga tggttgggtg ttgtttttgg atggtaactg aattttgctt   240  
gggcagtagg gtttatatac aggtctctgc ttctttgggt ttgattgttc ctaaagtgtat   300  
atgtctgtgt tgatgtgtat gcggaaaata ttaatatgtc gatatacaag gtgttggatc   360  
aaaaaaaaaga aaaaaaaaaa aaaaaaaaaa gaa                                   393

<210>       7969

<211>       423

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-036-Q1-E1-B9

<400>       7969

gggtcgatgg caatgctgaa atatagtcgc atcaatttct ttcgaattaa tagtttcctt   60  
caatattgtt gctatgtact acctcttact aacggataaa ctgttttaaa tagtttcctt   120  
caatattgta ctagcacact tccagataaa ctgtactcca acttactaac ggatgagctg   180  
cactgaacga cggcctaaag gatggtgagg agaaatgata ccgtacttga gtttcttctc   240  
aggagaacca gttttccgtt tacctagtta agatgggtctt ttattcgtct agaattgtca   300  
gcactgtgga tgggtcttga tcattacatt atacggcctc attttttaca aaactgcgtt   360  
ctgacgaaag ccgcactcaa caaccggggg tctctcttaa tcttangaga acaatancta   420  
tct   423

<210>       7970

<211>       431

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-036-Q1-E1-C1

<400> 7970

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ttcagaatta gctaaggaac ggtcgagaat aaacaagaag aatgccgaaa aaaggataag 120  
ttccataagc tggggccagg tgggtacgcg gtggcagtgc ctaagtggga taagtctgac 180  
aaagagatgg aggatgcagg tgtcaactccg gttagtaaga gctggccctc caggtgcagg 240  
acttggttct atgcgcatgg ggggagttgg acccgaagac aggcaatgtt tcgacgaagg 300  
catgtctgaa cggagccgac gatgcgctac ttgttgcaat agaagaggct cgatcggggg 360  
tgttccagcc caacagagag aacgacgagc ttacgcgtgc cctgggaaat cctgaacacc 420  
cgggaagaac a 431

<210> 7971

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-C4

<400> 7971

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ttgaagttaa cgagtataac cctagtggcc gctatcctgt acccgagctg tggaacttca 120  
aagagaagag gaaagcaact ctcaaagaag ctgtccagta cgtcctgaga cagtggcgca 180  
cacagaagag gaagcgctga gccagatat ctaaattcct gtagtgaact agaagtgcgt 240  
ttctgttatt ttcctcatga atgttggtaa acgtttagtt gtctaggttt ccttggatta 300  
ttcagcctgg tgtagcattg acatgaatgc tagtacttgg agattgtgaa tcgccctttc 360  
aggataatct ttttcgtgcc aagctatgtg ctagtatgaa tgaacggcta ctagtttggt 420  
gattac 426

<210> 7972

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-C6

<400> 7972



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 gactatgtca tgcattgaaa gctttacaag atttcagagg acaattccag caaggataaa 120  
 ggacctacta aagtggagat ctatgcatct tttggcggcc tcctgatgtt gctcaaaggc 180  
 gatccttcaa gtgctgctaa cctcgagctg gatcaaaggc tgttcctcct catccgaaag 240  
 gtgtaagcgt gtaatctacc ggataaccag tgcttgtagt tcaactcagg ctataccaag 300  
 cctgtgattg tttggatgct aatcgtcctg cacccttatg tactcttttg gcggtaatat 360  
 gactagattg gtaccattct ctgtagetta ttctgttcc cctggagcgc attat 415

<210> 7973  
 <211> 448  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-C8  
 <400> 7973

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 aaagggattg gcggcccgcg accaaggatc gaaaacagtg tcacgggtat ccctgcca 120  
 cagattccct tcactatcgc acgataatct ctactgtaca attgcacat agaccagac 180  
 tacacgaaaa atcctagtcc tgcctgaagt gggagtgaag aacggatgca gttgggcaca 240  
 caaaatatga gttattcttt tttctttta gtcttttct gcattgtcat ctttcttttg 300  
 ttttcttttt tgcgggaaac tttttttca tattcatcat tttcattttt ttcttttaa 360  
 ttttatttct tatttatttg ttttctttc ttttttattt ccatttcttt cttaaaagta 420  
 ccatttattt tcaaatattt tgacattt 448

<210> 7974  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-C9  
 <400> 7974

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 cgaggccgag cgccggcgtc gggtaggat caacgctcat ctacggcgc tcaggaggat 120

gatccctgat accaagcaga tggacaaggc cgccttgcta gccaggggtgg tggaccaagt 180  
gaagcacctg aagaggagag catgcgaggc cgcacagcaa acgcgggtg tcccaccgga 240  
gaccgactag gtctccattg aattctgccc eggagacaat gactccagac tgtacatgaa 300  
agcctcggtc agctgcgacg accgcccgga cctcgtcgcc ggggtcatcc aggcgtcca 360  
tggcctcagg ctg 373

<210> 7975  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-D1  
<400> 7975

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aattattcga ctactcattg atcttcaactt atatctttcg gagtagtttg tcttttgcgc 120  
tagtgcttca cttataactt ttagagcacg gtcgtagttt tattttgaag aaatagatga 180  
actctcatgc ttcacttagg ttattttgag agtcttaaat agcatggtaa ttttcttaaa 240  
atcataatat gctaggtatt caagaataat aaaattctct tatgagtgtg ttgaatacta 300  
tgagaagttt gatacttgat gaatgttttg agatatgagg atggtaatat tagagtcacg 360  
ctagttgagt agttatgaat ttaaagaata cttaaagttt gtgattcccg tagcatgcac 420  
gtatggtgaa ccgttatg 438

<210> 7976  
<211> 434  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-D11  
<400> 7976

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gcatttggtg taacccccct tgattgttct ttttctctg tcttataatc ctctgattgt 120  
caatccagtc atatattgat gatgtattga tcattgttta tcagaagttt tctacacatt 180  
gctgctggat agagcatcta ttgcaactac aattggcgat atctacacag atctatacat 240

aaaagataat aggaagtaag cttctatagt gtgacgtaga ggtattggcc atacaccatg 300  
aatgatagag gttgtgcagc tgatattcat agtttaatta cttattcctc caaagagata 360  
catattttta gctataatgt gttaccttgc tgacagtaca tcgatatatt ctccaatctg 420  
gttcaactat gcct 434

<210> 7977  
<211> 195  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-D12  
<400> 7977

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acttacagtg gtgatttgat ttagtacact aacggatcgt accgactttt ctggtgaagt 120  
tttgtctgga taaagtgtcc agttgaggag gtctcgatat gaggaaaagg aagaggcaag 180  
atctcaagct tgggg 195

<210> 7978  
<211> 429  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-D3  
<400> 7978

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caggacgagc tgctcccgat gctgcatggc aaccagccg gatctgcctc gacaggttcg 120  
agccctccgt cacgggcccc gtgcacatct ggcagggtgt tgggaagggtg atcaatgtga 180  
acaagatgat cagggccaga tggagtgaag atcctaatac cggaccagag gccgacttgg 240  
caagatcagg aagcagctgg accacaacaa ggacgtcggc ggcggcttct ccgcatgtg 300  
ggattattct ttgaccttcc acaattcctt caggcgtcca taacatcaag cataattttg 360  
gtgtttctta accttttgca ttctactcta atcatttaaa ttgggcctat gactcagaag 420  
ttttttttt 429

<210> 7979  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-D4

<400> 7979

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 cagtctgggg gcttgatatg gttgggcctt ttaagagatc caaggataag aagactcacc 120  
 tcttggtggc agttgataag ttactaaat gggtagaggc agagccattg agtaagtgtg 180  
 atgcagcaac gatggttcaa ttcatgaaga aggtgatctt ccactttggc tttccacaca 240  
 acattataac aaacaatggc actaaccact caaagggtgc tatgaaggac ttttgtcaac 300  
 gtgagcatat cgggcttgat gtatcattag tggctcacc ccaatctaag ggtaagctg 360  
 agagagccaa tcaagagatc ttgagaggca tcaagccccg gtttatggtt ccccta 416

<210> 7980  
 <211> 289  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-D9

<400> 7980

agacgaaaat cacaaggaag aacacattaa tcgcgccacg ggccttggtc aaaccacttg 60  
 ggtggaacaa gaaagatgaa aaaccaaag ttgccgccgg aaaactgaag tccaatgaag 120  
 agttcaaaaa tctggtgctt aagaagtgat gtccgtaggc aggttagttc gtcggtgtct 180  
 tcacgtccca ccaaggacct ctaccttga cctgacctgt ggaatgaatg aatataatga 240  
 agtggttaact tgaccttta cgggctaaaa aaaaaaaaaa aaaacaaaa 289

<210> 7981  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-E1

<400> 7981

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gtcccagcag aagagataaa tgacactgaa gccatggaga ctggagaaat ccctcatgag 120  
 agcacagatg acagtttaac agcaagtgca gcacttcctg atattcaaca agtcccagaa 180  
 caagaagcag tcgaagataa ggcattgcact gacaccacag aaaaccaagg ggaacctcaa 240  
 caaagcattg tttctacttc tgctgagctt actccaacag aagaagaaac agcagtagta 300  
 aagcatactc aagatacaca tgtacagaat gccagcagtg aaccgggaac tgacccaaat 360  
 ttgcttgtcc aatcagcaca tcaatcagaa ttggctgaag acagcaaggg tcaac 415

<210> 7982  
 <211> 332  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-E10  
 <400> 7982

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 tgatatatat cttacttggg agttagaaac tgaacaatgt ttacatgtt tacaatatcg 180  
 cgaggagaga cgggttgctg ctgctgtttg tgctttcacg agttttgcat gtatatggtg 240  
 gtctgaacat tgtagattat atccgattcg aactacttgg gctgcgttga caactgctat 300  
 gcgtacgcct tgagttccac catattatca ac 332

<210> 7983  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-E2  
 <400> 7983

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 acgcagtgga cctgtcgtcc attagacacg gacggcacgc atgtaattga cacaccggta 180  
 cgcgtgactt gctcgccccg cagcacttat acgatacaca tcagaccgcy aagagaacac 240  
 tcctcgtgaa cagtgcact atcattgcag actccttgcc cgatactcct gttgcgggtg 300

atagtatcgt agtgtttaca tcatcatgga tcacaactga caccttctat cagctaaaga 360  
gtatttgctt agctgcttag tccttcagtc ccacctc 398

<210> 7984  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-E8  
  
<400> 7984

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gcttatcgca aaggaggctg cgcagcggat gaactaagtt tagcattggt gaaccatata 120  
tattcctcat ccttgagtag tgttcaagca tactgtggct gtttggctcc agttttggaa 180  
gtcatttttg tttgtctgag acatcttgga aagaacagt taagaatgaa gtattttctgt 240  
ttaatgccag ttagtatttt tgtcgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaacaaaaaa aaaagaaaaa aaaaaaaaaa aaaagacaag aatcaaaaaca acccaccaaa 360  
aaagggaaac acacgggaac ccagag 386

<210> 7985  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-036-Q1-E1-E9  
  
<400> 7985

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agcggagaga ttttgttcct tggtcattgc cttacgctag atgatattaa ggtgggtccga 120  
cagttcaagc gtccgtgga tgtatcagag aaggaaattg atgccgcggg agatgggtgat 180  
gtgttggtca ttttggatct cagagctgat caatcattga ttgaagctgg agtgggtcga 240  
gaggttgtaa acagaatcca gaaattacgg aagactgtc agcttgaacc cacagactta 300  
attgatgtgt actacgagtc tgtagacaac agcaatacac ttgaagaaat tttgcagtca 360  
caggatcagt atattaggga cgtgcttggt aattcgct 398

<210> 7986  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-F1

<400> 7986

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 cacatcgctc aatacaaaga ggcttgatga tgatacagag aatcttgctc atgagcgtgt 120  
 gccgtcagac ctgaagaaga gcattatgca ggctagaacg gacaagaagc tcacacaggc 180  
 acagcttgca cagctgatca atgagaagcc acaagtcac caggagtacg agtcaggcaa 240  
 ggctatccca aaccaacaga tcatoggcaa gctggaaagg gctcttgga caaagctgcg 300  
 aggcaagaag tgaagccgcy tgcattctgac aggagtcgag gctttcaaga gagcttggtt 360  
 gggcaagttt accgctaaat aaagcttgct tactaaatca tgcgacttaa gaaaaccct 419

<210> 7987  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-F11

<400> 7987

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 gtagatacgt tggagacgta tcaactcccc caagcttaaa cctttgcttg tctcaagca 180  
 attcagttga taaactgaaa gtaataaaga aaaactttta caaactctat ttgctcttgt 240  
 tggttgtaaac atgaaaagcc agcattcagg ttccagcaaa tattatgaac taaccatact 300  
 cacaataaca cttaggtctc acaattactc atatcaatag cataatcagc tagcgaggca 360  
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 tggtat 426

<210> 7988  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-036-Q1-E1-F2

<400> 7988

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tccaaacacc gttgtatggg taacatcttg attaatcctt gcctcttacc taaatggttg 180  
gggtactttct ctcccaccct gtatgccatg ttctgcttgt acatgggaag gatatactcc 240  
taataatagt gtgtaaacac aattttcctt tccattgttc tgtttaatct tataatcgtg 300  
ttttcctttc cattcttttg tttaaccttt cctgaatcta acttaactga gcagagataa 360  
atccctgctt aagtangcac cttgttgtac cactctgtct g 401

<210> 7989  
<211> 357  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-F3

<400> 7989

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cgcgagaacc aacgggtaccg atgatgatgg gaatggcaca acgacgacga tgctgccgaa 120  
ccgccgggac atgatctgag tctgtgcgga tcggactgcc ccttgctaga taatgtacgt 180  
acgtacgggt accattaacc aagcatgtcg tgattgcatt attttttggc ccctgattgg 240  
atctcatagt acttatgata tacttataac caactcaacc cccctcctcc ttgctcttga 300  
ttgtattata tgtgcgagca tcgttctatg acagttcttt gatatactca cttgttg 357

<210> 7990  
<211> 419  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-036-Q1-E1-F4

<400> 7990

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 ttgccatgca actttccacc attccattta tcatgacaca ttcattattg tcatattgct 180  
 tagcatgatc atgtagttga catagtattt gtggcaaagc caccgttcat aattctttca 240  
 tacatgtcac tcttgggtcca ttgcatatcc cggtaacccg ccggaggcat tcatatagag 300  
 tcatcttttg ttctagtatc gagttgtaat cattgagttg taaataaata gaagtgtgat 360  
 gattatcatt ttctagagca ttgtcccaag tgaggaataa attaanaaaa agagagaaa 419

<210> 7991  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-F9  
 <400> 7991

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 tgacgaatgt gagtccatgg atatatgcac actcatcctt ccactttgct agcctttatt 180  
 attaccgcbc aactttcgcc ggtatcataa accccttatt tacctttcct caaaacagcc 240  
 accataccta cctattatgg catttccata gccatttcga gatataattgc catgcaactt 300  
 tccactgttc cgtttattat gatacgttcc atcattgtca tattgctctt tgcgatgatca 360  
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<210> 7992  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-036-Q1-E1-G1  
 <400> 7992

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 gatgggatcg agctgtttga cgtacgtagt agcttacgta tgtgtgtatg atcagacgtg 180  
 gccatgtgtg attcgattgc tttcaaaact gctaggttgt cctctcgatg tatcatttgt 240

tttagagaga taagacaaga ttttaagcatg atatggttta tcaattctgg agatatggca 300  
acaagttgag caacaccctt gcatgttcat gcatgttacg caacactgca ataccttgtc 360  
atgccacaca atatgggcgc gcatagacac cggaagctaa gccgatat 408

<210> 7993  
<211> 409  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-G3  
<400> 7993

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ggtgaaggcg ctcgtcggcg ctttcgagac cgtcatggac gacaaccaa gccccgccac 180  
cgccccgaag ccgcggtca acctccacgc ctgaactacg agtacattcc accagcatga 240  
agctcgatcg cgtgcgcctc ctctttatc cgggtactc tttaatcacc catcaacca 300  
atgtgtcgtc gtcgcacact tatctataat tacggtatcg cttatatattt gcaaggagga 360  
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<210> 7994  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-036-Q1-E1-G5  
<400> 7994

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tgaccggtcc atcctcttgt tgattcagcg atttcgtcca cgcctccctc tctccttct 180  
ctcgcgtgcc gtgcggtgcg gtgcggatta agtgcggaatt aagtgtacat aattcaagga 240  
ttaaagggcg gccattagag tagattattt ctttcgtttc ttggtggtgc gagtaataac 300  
tagaaatctc tcgcgaataa ctgtgtcgcg aatatcgatc tgagatcaa gagattgacg 360  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-G9  
  
 <400> 7995

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 ccttgtgtcg tgcaactttc accggtacca tacaccaac atataccttc ctcaaaacag 180  
 ccaccatacc tacctattaa ggcatttcca tagccattcc gagatatatt gccatgcaac 240  
 tttccaccgt tccgttcata tgacacgcat tactttctgtc aaattgcatt ttgcatgac 300  
 aggtagtga catcgtaatt gtggcaaggc caccttcata attttcatac atgtcgctct 360  
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<210> 7996  
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 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-036-Q1-E1-H3  
  
 <400> 7996

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 gttttttcct tgtttttagag tatcgcagaa aaggaaaatt aagtggagtc tagttgacct 180  
 gaaactccac ggaacttatt tttggaccag aagaagccca cggagtatcg gagatggacc 240  
 agaagagtcc caggctgccc acgatggtgg gggcgtgctc acgccccctg cgcgcgcccc 300  
 ctgcctcgtg gacagcccgg agatccaccg acgtacttct tctcctata tatacccata 360  
 taccctaaaa acttcgagga gcggaata 388

<210> 7997  
 <211> 366  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-036-Q1-E1-H4

<400> 7997

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cccgtgctg aaatgcatca gtgagtggca ttgcaaacc ctgacgcact gctcatcacc 120  
catcgagata cagtaccacc angcgttcat ataaacatct aactcgttc tgaatatcga 180  
attggttcac gactgttata cgtaagggtc ctggtaaatt tacgtatcat tgtacctatt 240  
tcacttgata cgactgttgt tttttcacac tgccaccatg ccatgtccaa gtgaggcacg 300  
cagcttctca aacttgtgtt gttgtgcctt gtatgctcgg atcttaagta cattactttg 360  
tttcac 366

<210> 7998  
<211> 382  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-H8

<400> 7998

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tgttcgtccg acgaaggctt cagggtgagcc cgccaaggaa gttagaatcc aggatgccgt 180  
gtgaagcggc gagcacggcg aaatgccgat ggtgctgcgt tagaagcggc aagacgtatc 240  
aaaggctgga gccgtgatgg actgcatcaa attgggtccg gtgaaccggc cggtcgttct 300  
cttttgttgg actagctgtt catgctgag ttcgtttagt cctagccgag agtatcgttg 360  
ctagtagttg atgcatgcat gt 382

<210> 7999  
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<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-036-Q1-E1-H9

<400> 7999

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gataccaatt gttggcgccg cctcctcgcg ttgcagcgcc gtccttctt ctacctcaag 180  
ctgccttaga caactctctt gaggtttctc tcaag 215

<210> 8000  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-A6  
<400> 8000

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gaagacgagg ctgttgcgct ggtggggcag gaggggctct tctggttcgg gagcttctgg 180  
ggccggacgg agcagggcga ccccggtgtct tccgaggatc agatgtacgc aagcttgagc 240  
ctgccggtag ttctagagag agtgccgggt taggcaccga tgatgatgca gtttgatgca 300  
agcggcttgc attgcagctt ctaaagtgagg tttctacttt tccatccggc caaggatttt 360  
atccagagta gcagctatta catcatttgg tcagtgcact gacccctac tgtacatatg 420

<210> 8001  
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<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-037-Q1-E1-B1  
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aattgcttcc ggtagcaagt acatctcaca cagtcagtcg gcgcgaaacg tttccattcg 180  
tatgtacatc acaatcagtc gtcctaagga aaacatcttc gttcacaagt acatcataca 240  
cagtttcccc cgttaaatca tttgtgataa cgttgacaat gcacacgata ttaacaattt 300  
taacgtttgc attaataaat ggatcataca ttgtgcgtac aagaaactgt atgggaaagg 360

ttgtccatca gacacaattt ttacttggtgta aacgtttgcc c

401

<210> 8002

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-B2

<400> 8002

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cgccatgtga cctttgagaa cgtggagagg tgggtgaagg agctccggga tcacacagat 180

gcaaacattg tcacatgct tgctggcaac aaagctgac tccgccatct tagggctgta 240

tcagtggagg atgccaaggc ctctcgtgag agggaaagca ccttctttat ggaaacatct 300

gcgctggagg ccatgaatgt tgagaacgcc ttactgagg ttctgactca gatctaccgt 360

gtggtcagca agaaggccct cgacatagga gatgaccctg ctgctccacc g 411

<210> 8003

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-B4

<400> 8003

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gacggccaca acgaagtgc tctctcaatt ccaggatcaa catgctggac gaatccaccc 120

ttcatgtcaa gttgcaacag tgcacgcaca caccagggag gcttctgtac ttagggacgg 180

tgaatctgca tcaacagtgc tggatggaaa atgcacgccg tccttcttcc ataaaccacg 240

tagggacctt gtattagcct ccccatctaa ccgtcaggaa gccctgacat gccctgctat 300

tgctgtcaac aatgctaccc tatgtagcac acgaactgaa ctttaagtatg tcacatggaa 360

cttcaggtag caaagccaac agaaccaata ttaatg 396

<210> 8004

<211> 99

<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-B5

<400>       8004

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cgctccgcgc gtgacacttg gcgcgggggg aactataaa                           99

<210>       8005

<211>       417

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-B6

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cccatccggg gatcacggtg ccggcatcac gggggctctc atcgccggtg gggattgcgc   120

ggatccagcg agacgacgtc gtttccgtgc atgaggaggc agatcaggat cgggatcgtg   180

accggtcctc gggctttctc catccggcga gatggcgagt cagattagag gatactcgga   240

cacccggcca tcggcgcgag ggtctgctgt attcttattc accgttgagg tggacgacgg   300

tgactgatct cgagggagac atcctcgccg gccggcacct ggatgatggt gagcaactgg   360

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<210>       8006

<211>       377

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-C2

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cagcatcata tccatcgtgt ccatccaggc acggatcgtg acgcaatacc ctttcccat   180

gcagatgcac gatagccaat cggagctcta cccttgaggt cctgcactgg cacgatgaaa   240

ccgtgcttcc ggatctcctg ccggcagtca gtcaaacata tcgaacgcag ctagcggtac   300

tccaaaatat actatcggtg cgtcgggtcg cagaccaagc agcagtacat cgataacatc 360  
atctggaaca tccatca 377

<210> 8007  
<211> 394  
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<213> Triticum aestivum  
  
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<400> 8007

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gatcctgacg gtgaagcgcg acaacatctg cagcttcac tccgagacca accccgggca 120  
cgtcgggtcg tgggagacca aggacagcca gctgacgatg gtggcggacg acctgaagcc 180  
gcgggcggtg ctgacgtgcc cggagaagaa gttgatccac caggtggtgt tcgccagcta 240  
cggaacccg ctggggatct gcggcaacta cacggtgggc aaatgccaca cgccaaggc 300  
caaggagatt gtggagaacg cgtgcgtggg gaagaggagc tgcgtgctgg ccgtgtcgca 360  
cgatgtgtac ggcggggacc tcaactgccc gggc 394

<210> 8008  
<211> 344  
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<213> Triticum aestivum  
  
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<400> 8008

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cacgcttgct attgacatgg gtgctttgtg tcttgctatc catgtgtcaa tttcatcagt 120  
tcggtgctat atcgtatggg tttcacctct agcctatccc aacttgtttg gaaccagatg 180  
ctttgttgtt gtcgtccatt ttgcacacag accaataaat gatttaacac tcgctataac 240  
actccacgtg catcacttat atctttctga gcttgataat ttttgcccca atgattcacg 300  
catatctttc atagcacggt ggtggatttg cttcaaagaa acca 344

<210> 8009  
<211> 416  
<212> DNA



<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-C8

<400>       8009

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tgagcacaac ggatcccaag ctgcagggca gtttcgtcgg cgtctatgat ggccatgggtg  240
gaccggaaac ggcacgctgc atcaatgacc acatgttcag ccatctgaaa ggatatgcat  300
ctgagcagaa gtgcatgtca gtggaagtaa ttcggaaggc tttccgagcg acctaggatg  360
gattttctct ctctagtcag taatcaatgg tcagtgaggc cgcaattagc ggcgggt    416
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<210>       8010

<211>       373

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-C9

<400>       8010

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tccatgaagc cggcgggtcga tccgcaacag accagcatgc gatcaaccgt gcgtgcgagg  180
catctcgcta cgaccactat tacgagctca tgtacacttt gcacaggtca ggtcgagtag  240
cacatctaca tatatctacc gtgggattgg gactcgacaa tgttggtacg ctgtcgggca  300
cctatcttct tcgctgggtc tgctggttcc cttgactgcg acgggaatta ctttagtatg  360
tactgtatcc atc                                     373
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<210>       8011

<211>       371

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-D1

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 acacatcgtg agcatggagg acgacacaac cccggcggcc gccccggctc tccggcgcac 180  
 gcacgcacgc acgctcttga agaagaagaa gaagctaaat gtcatgtcag tgaacgctga 240  
 attgcagcgg ccggccacga tcgaccgtcc ggcgtgaaga gacggacgac gacgaattcc 300  
 gagccgacca tcccaccggc atgtagtaat gtaatccctt cttcgteccc agttccccaa 360  
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<210> 8013  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-D4  
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 ccccaaaagg cctactccga attcgactat ggggactcag ccg 103

<210> 8014  
 <211> 339  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-037-Q1-E1-D5  
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 taccttgctt cccaagaatg aggactccaa tgcaccttgg agacttcagg ccgatcaact 180  
 tgatacatgg aactgcgaaa atctttgtca aggctttggc tactacgctt cactccctac 240  
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 attttaaatt cgtgctgaac actgcaagga cccttcaca 339

<210> 8015  
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 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-D7

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 atggatctcc ttggtgagcc acctactgta cagtgccatg tctatgacaa gctatgcaac 180  
 acaagcaatc tagtcaaaat gctgtcgatt ctttttgaag tttgttactg aatgaatacc 240  
 tgaaccaaac ggtcatctgc gtatcatttt tgttgtgaat ctcccccttc tgctggaatt 300  
 ggtcctgctt cagctgggtc caaccgaagg gaactgcacc aacagtaccg acgaaagaga 360  
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<210> 8016  
 <211> 271  
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 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-E10

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 cttgtctgga ttttccttcg ccagttgat gataactgga aggaagttag tagcaaaatc 180  
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<210> 8017  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-E2

<400> 8017

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aataatgcag ctcggggggc gctcccagct aaatggactt ggaaaatgtc atctggtttt 180
gttgttgaag gagcgttggt gtagctaaag gcgcgcgcta aagaaaccgc tcctcatgag 240
ccgccaaaac ccaaagccct cgggaggctc tgggggctcg ggtggctccc tgaggaccat 300
ctctatctcc gccaggacca catgatgcc ggctcctctg gtttcagga tgctccgtag 360
gctgcgtggt aaagcggctg ccatgctcgg caggccaaat ggcatgcgaa cat 413
  
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<210> 8018  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-E9

<400> 8018

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gccccttgga ttttcttcca tcttcgttgg ctgatcggga cgataaagaa gtggcctcac 180
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gcgtctctgg caatgctgat ggcatactta ggcgtgtgga attgcatcca gcaaagagta 300
gggttatggg tgatgaaaac tcatcaatga tgagcagctg ggtaacaaag gactcgaact 360
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agtacttctt gaaagcagcc gcaa 444
  
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<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-F2

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tcaacgagac cgacagccag gagatccacg tgg                                   93

<210>       8020

<211>       446

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-F4

<400>       8020

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ccaaaccag gccatatcag aactgagca taagcacttt gccatgtaga tagagaagag   180

tgacagaagc tataaatagg tacacaggaa gcaaataggt ttgtgattgg atggcactac   240

atgttcatag gagtggattg cagagcatgt gttctaccaa taatgagagc ttatctttca   300

tgatttttct tttgtttggg tttgactga attttgtttt gtgtgaaggt gtgcacagtg   360

caatttaact gcactgggtg agtcatgagt gaagaaagct tgcattttgc acaaataatt   420

ggtatggaag gtactcctgt ttcaag                                       446

<210>       8021

<211>       401

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-037-Q1-E1-F5

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tactggagcg ctctgtcaca cccaatatgc gatactatcc taaagagact cgaaggtccc   180

accaaggata gaaccgcata ttgaaacgct tttgcaaggt ggatatcatt acatcaacat   240

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<210> 8022  
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 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 cgatccagcc tcagcttcac ctgaggcccg ccctaatttt gtttgatcaa tttttttgct 300  
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<210> 8023  
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 <223> Clone ID: LIB104-037-Q1-E1-F9  
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 ctgatgcata gcctatcctt gctactactg ttgatacctt tacctgcaat cctacatgct 180  
 tagtatagga tgctagattt ccatcagtg cctacattc ttgtccgtct gctgtgttat 240  
 actatcgggc cgtgatcacc tgggcggtga tcacgggcat atacttatat actatataca 300  
 tgacacatgt gatgactaaa gtcgggtcgg ctcgtaggag taccgcaag tggatctttg 360

tggcggagcg acagggcagg ttgagaccgc ctacgtaaga ggtgggcctg gccc 414

<210> 8024  
<211> 255  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-G1  
  
<400> 8024

aagcacaata gttgtttctt acccgtctgc ggtgccccct ccacgtttac tccctccggtc 60  
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gtgctaacgg aactcatcga ctccctcgta cctctactgg atcaagagtt caagggacgt 180  
catcgagctg aacgtgtgca gaactcggag gtgccatacg ttcggtactt gatcggttga 240  
ttcgacaaga cgttc 255

<210> 8025  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-G2  
  
<400> 8025

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tggcgcaggc ggtggaggag tggtagccgc agatgcccat catcacgcgc tccctacctca 120  
ccgccgccgt cctcaccacc gtcggctgca cccctcgagat catctcgccc taccacctct 180  
acctcaaccc caagctgggtg gtgcagcact acgagatctg gcgcctcgtc accaacttcc 240  
tctacttccg caagatggat ttggattttc tgttccacat gttttttctt gcgcgctact 300  
gcaaacttct cgaggagaac tcattcaggg gaagaacggc tgactttttc tacatgctct 360  
tgtttggtgc tactgtcctg actagcatcg ttctgattgg tgggacaata ccttacat 418

<210> 8026  
<211> 387  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-037-Q1-E1-H6

<400> 8026

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ttgatccgtt cttttgcta ggtcagggtc cactggaaaag ttgaaaagcg cttgaaagtt 120  
tatgctgcct gttcaaata tcttcttatt tcaggggaaa tgatctttac aaccactca 180  
agcatccagg acgcagtcog cataataaag cagtttgatc gtgtatcgat cacgtagacg 240  
gtcagcaccg cttttcatta taatacagaa aaagtaagta gtaaattcag ttattattat 300  
gctaattggac atagtaacaa ttttgtttct gacgtttttc caaccgtctt gacaacatct 360  
agcttcatgt ttccagcttc agtcaaa 387

<210> 8027

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-037-Q1-E1-H7

<400> 8027

gtcgatgggg atcctgatag tgaatcttat tataacgaaa agagatgcag ctgcatatgg 60  
ttttcgttgg ttgcttcact cgagcataaa cgggactcac ctctaccaca gataccttca 120  
cactatattgc gactaagaga tgcaaatata cctgcttctt ctatccaaaa gtacctcggtg 180  
catatactca gtctcccaag tgagtccgag gtggaaataa attgctgcgg gcagccagtg 240  
aaccttacac aacctctgcg caatttagta gagttgtggc tgagggggcg atcagcacag 300  
gcaacaccgg ccattgtagg ctcccccgcg gaagagtttg tgatggtgct aaattatgga 360  
cggccaaagc ccatggaacc tttgagtgea cagtaatgat tcaaccatt tccttttgaa 420  
aggtccgggc ttt 433

<210> 8028

<211> 357

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-038-Q1-E1-A3

<400> 8028



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atcacacgta tccttggccg gctgggggac aagactccat gtcttggcag tcgcagtagc 120  
caccgggacg ctcggtgact gttccggccg tcatttccgg cggcggtccg ggaaacatca 180  
acttgccggg tggcgggccac ttgcaccggg agcgcccgt aagctgagat tattgtctcc 240  
agctttgagg gttcctagag ctgcttcgcc tgcagctgtt gagaatggga gctctagcan 300  
cagtaataca gtccctacac caaaagttat aatagatcaa gactcagatc cggatgc 357

<210> 8029  
<211> 374  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-A5  
<400> 8029

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cacgggcaag agctagccga gcgccctctg tgcacgctga cctcttcaca gcttctaate 120  
gaggcaccac gtcaaggagc tgctgcacca aattaaata acttgtcggc ttcgatccgc 180  
ccaggcctaa gcaatccatg acatatgtca tggcgagtcc ggacagtcta ttcagctcgg 240  
cccactaggg taggcgatcg tccactgcaa gtggacgccc tggattggta aactgcgacc 300  
agaagagttt ctccacttca tgattgtcct tatcttgaaa gtacctggtc gcatcggaac 360  
cactagcctc caaa 374

<210> 8030  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-A7  
<400> 8030

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acaggcaaga agttgttgaa gactcttcag gatcaaccca gaatcattcc atcaaacaac 120  
tacaagagac gtagcaacac ctaaggaaaa ctgagaagac tgcacggggc acagggcacg 180  
actactgagt ccgagaaccc ctagggtagg atgagtcgcg taccctctat gcgcagatga 240

gtctgtatga tggttcaaata agaatcgtga ttgtgtgttg cttgttttta ttgtttgtgt 300  
 ttttagatag gccgcaactt ttgccctatg caacaagtac gcaactatat caccttcctt 360  
 accttgtttc ttttgtttgg ccctttcggc acttgtttgt ttgcacttgc actataaaac 420  
 cccctt 426

<210> 8031  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-A9  
 <400> 8031

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 taacaaaatt agataagtat ctatctaaag taagaatttt tttctttcag aaagaagata 120  
 agaacaagag gctcaccacg gtgggtgctgg cgacgagatc gacgcgggcg atcgacggcg 180  
 gtgaagacgg ggacgggaca tgacggaccg ctaaacctag acaaactctcg gggaaaatgg 240  
 agctcggagg tcgagtttcg agaggagaag gattaactaa ggtggctcag acatttcac 300  
 gaacacctca tgttcatang aggtgagcta gagcacccaa atgcncccc ccctcgccgg 360  
 ctagaaaaaa acagagcagc tcggagagac tgcggagccc gaggtgaagg tgctgaacct 420  
 gaccatcctg t 431

<210> 8032  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-038-Q1-E1-B1  
 <400> 8032

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 tgtggcgaca caaccagtac aagtggatgg agacgcgggg cgtggacgat gacgggcttg 120  
 tgagctgcct cccaaggac atccggcgag atgtcaagcg ccacctctgc ctccgcctcg 180  
 tccgccgcgt gccgctcttc gccaatatgg acgatcgct cctatacgcc atctgcgatc 240

ggctcaagcc cagcctctgc acggagtcca cctacgtggt gcgggaaggg gaccccgtcg 300  
acgagatggt cttcatcatc agaggccgcc tcgagagctc caccatcgac gggggccgcg 360  
tanggttctt caacaaggag ctcttc 386

<210> 8033  
<211> 392  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-B12  
<400> 8033

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aggcacgggg agagtgcgag gcctgggagg gtgcgtggca tcgcggacgg ggtccagggc 120  
gacgagagga agcaggaggt ggccagggga agcaggaggt ggccgaggcc tctcgggcgc 180  
gcgccacgcc tcggtccttc tggcgaggag gaagacgaca gggggagtgg agatgggctg 240  
ggccgtgctg ggccaggtaa gtgggcgcca ggtaacttcc ttctctctct ctcttttatt 300  
tcttttctat ttctgttatt tttttttgat ttgatttaaa ataccaaattc atttaataaa 360  
atcctggaaa caattatggg tgctttctga at 392

<210> 8034  
<211> 209  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-B3  
<400> 8034

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ttggctctaa tacgtcaaaa aaaaaaaaaa aaaaaaaaaa agcaaaaaga aaaacaaaaa 120  
gaaaaaaaaa aaaagaaagc tcaaaaggaa ccacacataa aatacacaaa cataaaacaa 180  
aataaatcca tctagacagt catcaaaaa 209

<210> 8035  
<211> 442  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-038-Q1-E1-B5

<400> 8035

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taccttggga tccgggtgga ttcattactt gagcactata tgcctagctt aatggcttta 120  
aagaaagcgc tgccagcgag acaacccgga acttttagag agtcatttat ttctgttgag 180  
tgctttcata tagtttaaaa acaacaaaaa taaagagggg aaccctaaac tttttctaaa 240  
agaaaagtga aagtgagaga gacgagcatt gtgaaagtgg gggacgtcct tgaactttgt 300  
tcatgcccac gggaactttg tgaatcttaa ttacagaaac ttttcaataa aaataattat 360  
ccccttgtag aattccattg tattataaaa ataatgtgcc aagggttgcc tttaggatgt 420  
ntacatttcc ttgatggttt gt 442

<210> 8036  
<211> 407  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-D4

<400> 8036

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aaggtaaacc caaaatttcc cttagggtac cctatgaaaa cgcatttttc taacttgggt 120  
tcaagctttt caggttgagg tttcttgaca taagcatcgc atccccaaac tttcagaaac 180  
gacagcttag gtttctttcc aaactataat tcatacgggtg tcgtctcaac ggatttcgac 240  
ggagccctat ttaaagtga tgtggcagtc tctaaagcat aacccccaaa tgatagcagt 300  
acatctgtaa gagacatcat agatcgcacc atatccaata cagtgcgatt acgacgttcg 360  
gacacaccat ttcgctgagg tgttccaggc ggcgtgagtt gtgaaac 407

<210> 8037  
<211> 444  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-E3

<400> 8037

taccgggcaa gaattccgga tcgacgggct tctttgagca atttgacaca aagaaaaaat 60  
gtcacggaga ttgttgcctg gacaacttct cgggcaagga atgcaacgca aagagccaaa 120  
tcgggtggggt gtttgacgct cttcgtgtca ctgatgacct gttgatgagg agggcatatt 180  
ttaggaagca gcagcttgac aacaaaacaa catcacctaa ctctaactga agaggacagc 240  
cgggtgtgatt tgctcttaca ttgatatcgc atgcgtatga ataatgggcc aatggaattg 300  
ggagcggagt aagaagctca tgttgccctt atgcatgtaa taatcatgcc tgccctgcatg 360  
gcccgcctagc tgttgggtcca atgcctggct gcctgcctga actggcgctca atttccagtt 420  
tgttttttgta atatataata actc 444

<210> 8038  
<211> 184  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-E4  
<400> 8038

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ccttaataacc attgaatatc cgggtttggc caatgcactt tggtaatggc attgccccaac 120  
tgaaaaggca ttgcaatgat gtgatattat gatatgcttg aagcacgcct agtgactttg 180  
atgt 184

<210> 8039  
<211> 389  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-038-Q1-E1-E6  
<400> 8039

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gcaaggagct ctccgacctc tgcagccact gaccgtaccg atcgaccgct cgacccgatc 180  
gatgaaacga cgatggtggt tcctgtcgcc tgcttgccctg gcggcaacgc gtggtggtgg 240  
tgtacaagta aagcaatgct gtcggaccc ataagtggcg gcagtacgta gtcgtaggcg 300

tcttttgcag tggcagtgcc ggtctgggat cggagagtgg agtggagtgg agtgtcgag 360  
cgttttggtc aggtcatcat gttgttgct 389

<210> 8040  
<211> 445  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-038-Q1-E1-G1  
  
<400> 8040

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atcaaggaca agatcagcgg cgacggccac ggcgacggca agaaggacgg cgaccacaag 120  
gagaagaagg acaagaagaa gaagaaggac aagaagcacg gcgagggcca caaggacgac 180  
gacggccacg gcagcagcag cagcgacagc gacagcgact gagccagctc cggcccgcgc 240  
tccggcagcg tgcagtgtan gcgagatcga tgaataacac ttgggagaag tgtgacagac 300  
atatatgttg cacggtttgg agcgtgtggt agcatatgta tgtaatgcgt gacatgcctc 360  
atggatcttg tgatgtataa taattagccg gccgcactgc actgaacggt gcttgaata 420  
ataacgttaa tcatgttggt attga 445

<210> 8041  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-G2  
  
<400> 8041

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acacccccaa ccaccctttc tacagggttg gaggcacga caaattcatc gccaggcaa 120  
agaagatccc cagcaagaac gcttgatgac gaggtgtggc caccgccctg tacaagttaa 180  
tttttttggg atttcagctg tccgccgaa acttgctcac aagcaggagt gtgccagctc 240  
ctgctgaggg atccttgttt ttgttcgttt ttactccaat ttaccgtaa taagcaactg 300  
cagtgcatt ggtttagtct gcacaacagc aaactactc ttggcttgga aaacttgt 360

gccctttgta atgaaaaacc ggacgcactg c

391

<210> 8042  
<211> 177  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-G4  
  
<400> 8042

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ccgcaaataa aaatccaaaa aaaaaaatat aaaaaaaca aaaaaaacc ggcgcccaa 120  
aagatcaaac taacttcctt taagcaatta aacctcaat gtacaaaatc aataacg 177

<210> 8043  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-G8  
  
<400> 8043

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gtcatgtccc ctgagagctt ccttgcaagg tagaggaaag gcttctcgaa gttgtagttg 120  
ctcttggcag agatctcgta gtactggagg ttcttcttcc tgtggaaggt caccatcttg 180  
gctttcacct gccggttctt cacgtccacc ttgttgccgc acaggacgat cgggatgttc 240  
tcgcacaccc tgcagatgtc tctgtgccag gtggggacgt tcttgtaagt gagtcgggag 300  
gtgacatcga acatgatgat tgcacactgg ccatggatgt agtatccgtc acggaggcca 360  
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t 421

<210> 8044  
<211> 341  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-038-Q1-E1-H5  
  
<400> 8044

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 gaatcacgag tgaaactcaa ataagagatc taaccagaaa gttcagctta agaactctgg 120  
 ttcgcaaaat gaatcaaatc aaacgaagca tgaatactca agcggtgaga gaagcaagct 180  
 tcgtttatta atctggacta aggtcaaatt ttacagtagc aaaaacgtgg ttaagttgga 240  
 taaacggaaa gagggtttcg agacgaagct ctaggcgctt gaatcgcttg attccgataa 300  
 atgagcgaaa agttatacta gaacgaagat cggatcagaa a 341

<210> 8045  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-038-Q1-E1-H6

<400> 8045

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 ataacctacg atgatatgtt atttgattct gctgaaaaac agaaactttg cacgcacgaa 120  
 tataattttg ttaaatacaca ggaatgtgct tttgcgatga ttctttttga tgctgttcca 180  
 taaaaaaatt gtcccgact tcctattttg gtaggatgtt tagagttcca gaagtttgcg 240  
 ttagttacag attgctacag actgttctgt ttttgacaga ttctgttttt cgtgtgttgt 300  
 ttgcttattt caatgcatct atggctagta aattagttta taaaccataa ataagttgga 360  
 atacagtagg ttttaacacca atataaataa agaatgagtt cattgcagt 409

<210> 8046  
 <211> 70  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-A10

<400> 8046

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 atgattactc 70

<210> 8047  
 <211> 423  
 <212> DNA



<213>       Triticum aestivum

<223>       Clone ID: LIB104-039-Q1-E1-A11

<400>       8047

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atcgaggact cgatgaagaa caactgcccg atctgctacg agtacctgtt cgactccctg   180
agggaggcgt cgggtgctgcg atgcgggccac accatgcact tgcagtgtt ccacgagatg   240
ctcaagcacg acaagttcac ttgccccatg tgctccgtgt ccatctttga catggagaaa   300
ttcctgaggg ccttagatgc cgagattgag gcgaagttct tacacatggg aaagggatgg   360
atcgtgtgca accactgctg ggacacgacc cgggtgtatc cgggcatgac gggacagaga   420
aag                                                     423
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<210>       8048

<211>       114

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-039-Q1-E1-A12

<400>       8048

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ggtgttatgg tgctacctga atgagttata ccggtgttgt ttggtaccat gcat       114
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<210>       8049

<211>       396

<212>       DNA

<213>       Triticum aestivum

<223>       unsure at all n locations

<223>       Clone ID: LIB104-039-Q1-E1-A4

<400>       8049

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gggggtttca gcttgttctg aaactgcaac cttggttatc agccgactta caccgggatg   120
gtagcaggcc agcaagcagc acttgactg aacttgtttt tgcattgtcta gatggggaag   180
tgattcttct ctgtgattct tgtatggcca ttgtgtataa tagaaacgtt tgcattgcaac   240
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cacggctctg gctgcatggg ctaaagagct aaacatgaac agagaacaca tctggagtat 300  
cctgtancat acttggggaa cacacgtctc tacagtgaat ttgctgtata cgtgtctgtc 360  
agttcgtnta taattttaatt taacatactt gggcag 396

<210> 8050  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-A5  
<400> 8050

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gcagcctgaa cctgctctat caggatacag tgcgaaaaat gggatatgat ccctcgagga 120  
tcaaaccag caaaaccacc tttaaaggcg tcatcccagg tgtagaggcc cattgcacag 180  
gctcaatcac actggaagtg gtctttgtat caccggataa cttccgaagc gaagagttaa 240  
tcttcgacat cgtcccattt cgaagtgggt atcatgcact gtcggacgg acaacatttg 300  
caaaattcaa tgcagtgccg cattacgcgt acctcaagct caagatgcca ggacctcgcg 360  
gggtcataac agtaaatgga aacatagaat gtcgctctg tacagaagag cacactg 417

<210> 8051  
<211> 451  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-039-Q1-E1-A7  
<400> 8051

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aacttgtcct catctttggg gtatgatccc gtctgaatgc tttcctctc ttttgtgat 180  
tggcctttaa ggtgagggtc tcaatgaaca acggctctc cttaatgtct acgccatctt 240  
cttcactctc acaataaatg tcttcatgcc atggctcgcc ttggccgtca gtcgcttctt 300  
gattgttggt gctgccaatg tgctcgacac catgatcttg gctgtgaccg tcttgacttt 360  
gggtctcgtc gcgatcgaag gcttggccat ggccctcggg gtggaaggct ttggcactac 420

cctcatagat gatgttctcc atgaaatcgt t

451

<210> 8052  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-039-Q1-E1-A9  
  
<400> 8052

gggtccacgg gattactgta gagcaattga tagaaaagcg aataattatg agaatatcta 60  
ggcatgttca tgtatatagg tatcacgtgt ttacagttg gacaaactca aggccggcat 120  
ccaacaacta ttaagtccaa cacaattcga cggtatcca gcatgcatct agagtattaa 180  
gttcataaga acagagtaac acattaggta agatgacatg atgtagaggg ataaactcaa 240  
gcaatatgat ataaacccca tctttttatc ctcaatggca acaatacaat acgtgtcggt 300  
tccctttctg tctactgggat caagcaccgc aagattgaac ccaaagctaa gctcttctcc 360  
tattgcaaga aagatcaatc tagtaggcca aaccagacta ataattcgaa gagacttgca 420  
aagataacca atcatg 436

<210> 8053  
<211> 262  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-039-Q1-E1-B1  
  
<400> 8053

taattccaag cctggtggaa cagaaaaaag gccaacctta gcccaaattg gaaaggcccc 60  
ttaacaacca acaaattcct aacgggaatt gaaacggcaa gccatgcaac cgaacaacga 120  
accaagccaa aaccaaggga caaaagccgt ctttgaagaa tttaagccta accccgggac 180  
caagggtcct ccccttctc cgttcaactt tcaaaattcc ttccccaacc ttggtttccc 240  
tcctttttcc ccaacttttt tc 262

<210> 8054  
<211> 337  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B10

<400> 8054

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ttattttattg attgtcttcc ttatgagtgg cggtcgggga cgagcgatgg tattttgcta 120  
caaatctacc cccctaggag catgcgtgta gtactttggt tcgataacta atatattttt 180  
gtaataagta tgtgagttct ttatgaataa tgttgagtcc atggattata cgcactctca 240  
cccttccacc attgcaagcc tctctagtag cacacaactt tcgtcggtag cataaaccga 300  
ccatttgctt tcttcaaaac agccaccata cctacct 337

<210> 8055

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B11

<400> 8055

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ctgggttctgc taaaacatg tgaaacacgt tgtcccagac aagcatggcc atgtagtagt 120  
catataatta aacactaccg agttcagggtg gggaaccatc atcgaggata tcgaagtctt 180  
tacgcaagtc catggattag atccaagca tagacttctt ttccttgaac aagtcaatca 240  
gtggcttagt gtgctaggga cacatataga atgaagggtg caagtctcca gactacagaa 300  
tacttcgcac gtgcgcatga ctgatttggg atgattccaa aggaaacaaa acaatctttc 360  
tcaaattcac ggcggcaact ttcaccaa atgcagtgtat aagaggaagt cactcctttc 420  
atcaaacaaa 430

<210> 8056

<211> 226

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-B12

<400> 8056

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 ggggttggcg acgtggcggg gcgctgattg ggtcgggagt gaggtggang gcggcggccg 120  
 gacatgttca agcgggggaa aggatgaaac gtccccggcga tgcgganggg gaatttgatc 180  
 tannggtttt gccccgaaaa ctccgngnga aggggaacta atatat 226

<210> 8057  
 <211> 329  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-B2

<400> 8057

cgggggccaaa ggaaaataga agcanacgtt ggtaccggta ggtccggatg cgcaatcaac 60  
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 gttttgtggg atgtgtgacc cctgaccgct gatcgccgct gctctgcttg ctaacgacaa 180  
 gttcatgtag ctgacctgtc caacatcact gttggccggc gtacaaaatc cttgcgtctg 240  
 tgtggtgccc ctgggactga cctgcatcag ttaactagtg tacatttgca gaatctctct 300  
 gttttcttgc agaaaaaaaa taannngnt 329

<210> 8058  
 <211> 289  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B3

<400> 8058

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 tccaagggtgc aaagataaaa aacttaaggt tgaaggaata aaaaatcctc ctgggttcga 180  
 ataacaggga aattcattaa ccacaaaaac catcaaaact ataatctgaa acattatcct 240  
 aaataaacia ttttctgaat aatgaataaa ttctaaacca tggggctat 289

<210> 8059  
 <211> 369

<212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B4

<400> 8059

caacaacggg aaccctttcc aaaaattttc ctaaaaaggc ctgaatgtct ccctctcaac 60  
 tgacaaccct cggcaaattc acctaacaaa agaacctcgg gttgaaaaat acattgttgc 120  
 tgcttcgctg tggaacctta gttcatgtga cctgtgtgaa ataccagga attctgtgta 180  
 ccattccggg ttctctcaaa ggctgaattc aactggatt ggtagaaact actataaaag 240  
 aggtcccgac ggcaatgaca tcaccagaca aatgttcctc acgtcaggat tgaattccga 300  
 cacaacattt ggaaagacga gatggagctg atacatttcg gaaatgttaa gcctacagaa 360  
 gaaaacgac 369

<210> 8060  
 <211> 455  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B7

<400> 8060

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 aacatagtct ggaggggttg aatagactac cattaacaaa ggggactgct tgtcaacttt 120  
 tagtttcctt gcaattttta gcttttctac agtagtatgt tgcctcccaa aggagttatt 180  
 gggtttcccc caaagaggaa ggatgatgta gaacaacaac aaagtatttc cttcggttag 240  
 agaacaaagg ttatcaatcc tgtagaaagc ttccatgcta acaatataaa cacacctaca 300  
 cacaacaag atacaaactt gcaccaaca tggcaagagg gttgtcaagc cccttgcctt 360  
 gctaattaca agattaaaag aaaattatag agataaatag tggtaaaata gcacgggaaa 420  
 taaaaagagt aaattgtgta caagaattta ttaat 455

<210> 8061  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-B9

<400> 8061

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tcaaggttct ccagctgcca tggcgctggg ggatgaagta cttctgggac accttgctgg 120  
acgccgacct tgagagcgac gcggttgggct ggcagtacat ctccgggtct ctgcctgatg 180  
gccgtgagct cgaccgcatt gacaacccgc agtttgaagg ctacaagttc gaccatacgc 240  
gggagtagct ccggcgatgg ctgccggagc tggcgaggct accaacggaa tggatacacc 300  
acccttggga tgcacccgag tctgtgctgc aggctgcagg aattgagcta ggttccaatt 360  
accctctccc cattgttgag ctagatgaag ccaaat 396

<210> 8062

<211> 312

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-C1

<400> 8062

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agggaaccaa tttttgtaat ggggttagta gggtagaga ggagacatgg ataattggta 120  
ccgctgctgc ttactttggg tctgcggttg ttggaggtag ttgagactgc tgttattagt 180  
ctgttgctcg agctgtagag aactctttgc tgctgctgtt acttccttct gatgtttttt 240  
cgttttgtta ttatatagcc ggatggattc gcacgggaat ttaacgcgaa gaaaagatat 300  
gcagttttat ct 312

<210> 8063

<211> 409

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-C10

<400> 8063

ttccgggtcc acggggatgc cgaatttgtg tgctgtggct gggcatacgg tgaatggagt 60  
ggccgagttg cacagcaaca tcttganaca cgagctgttt gcagattatg tctctatttg 120

gcctaacana ttccagaaca naactaatgg aattacaccc cgcagatggc tccgtttttg 180  
 caaccctgag ctgagtgaag tagtcacaaa atggctaaaa acagatcagt ggacaagcaa 240  
 ccttgatctt ctcaacgggtc ttcggaaatt cgcagatgat gaaaaactac atgctgagtg 300  
 ggcagcagcc aagctggcca gcanaaagcg cttagccaaa catgtgttgg atgtgactgg 360  
 tgttacaatt gattcanata gccttttcga tatacaaatt aaacgcaat 409

<210> 8064  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-C11

<400> 8064

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 ttcaagttcg gctacaacgc cgccactggg cagtacgagg acttgatggc tgctgggtatc 180  
 atcgacccca ctaaggtggt gagatgttgc ctggagcacg ccgcgtcagt ggccaagacc 240  
 ttcttgacgt cggacgtggt ggtggtcgag atcaaggagc ccgaggccgc gcgcctcgcc 300  
 aaccccatgg acaactccgg cttcggatac tgatgagcga cacggccgag tttctctgga 360  
 tgacgtgggt taacttttgg taccatggac caagtttga gagattgatt gatgatgatg 420  
 atgt 424

<210> 8065  
 <211> 70  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-C12

<400> 8065

gaaaaagaaa cngtgcnaan agaacaaaat tggacaacaa aaaaaacaaa aaacgggagc 60  
 cccaaaagga 70

<210> 8066



<211> 425  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-C2  
  
 <400> 8066

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tttttattat ttttattatt ttctgtttat tttctatttt tctctttctt ttttctgcct 120
tttttctttc ttcttgcgct ttttcttttt gatttttttt gtgttttcag ctaatgtggt 180
cagaattttt cataaaaaact gagattttca gatttttctt cagaaatttc atagaatttt 240
agaatttcac aaattgttcg cttattttaa aaaagtgttc atcttttcaa attttgttca 300
caaaactaaaa aatgttcggt ttaagaaata tggtcccgct ttcataattt gttcacaaat 360
tgctcaggaa tttcataaaa tattcccact tttgaaagtt gttcaaaaca aaattctgaa 420
aatg 425
  
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<210> 8067  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-C3  
  
 <400> 8067

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ggtccaaccc gaagccccgg ggcaaaacaa ccggaataac ccccaaaagg tcaaacaaca 60
cggggaatcc tgggaaataa ccggaccag aacgaacaca agccggcaaa tccaattttc 120
aacaaccaa tttaaaactt gcaaatttta acaagccggt taaacttgat ttggggccct 180
tggaaaaatt tggtagcccc ggaaccggca atttgaatta acttacaagg tagggccggc 240
cggccggtgg tgtcattcaa aaccggcttt ccgcttggtg caccaaattc ttgcaggga 300
agtgtaggtc caaaattttg caaaggaatt ggtgaactgg gttcttttat tagaaaccac 360
acttcagcg 369
  
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<210> 8068  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-C4

<400> 8068

actacgaaaa gatgccgggc gtgaaagcgg tggacatggt cgacgccgac gcgctggcgc 60  
acatcagcgg gatgagctcc tacatgtaca accacacggt ggagtcgtgg atataatctg 120  
actcacgacg aacacgagcc cgctaattcc atttttcacc aacctatattt acacgtgcag 180  
atttttaaca gcctgtttta cttgattttg gtcccgtgga ataattttgt agctcctgaa 240  
gcggcgagtt gaatttactt accatgtagg gtcggccggt ctgttggtgc agtcgacatc 300  
tgcttttcgc ttgttgacgc taattcttgc acgtgaatgt gaagttctac agtttgacga 360  
ggagttgtgt acttggattc ttttaattga aaagcacagc ttcagcgaat aca 413

<210> 8069

<211> 352

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-C5

<400> 8069

cccggtcca cggggagttc agaggcgtcg ccatggacat ccaggaggag tgcccgcccg 60  
acgacccctt gctccggccg tggcagatcc cgtaccctgc caccgccatg cccatcgccg 120  
ccaccgccac gcacatgctc cagtactgat cgatccggtg atgattgggt caataattga 180  
ggatcccttg taggagcgga gctgagctgt ggctggcaag aggaagaaga tctaccctac 240  
ttggctgctg ccttgaggat tattaccaag gcgtagtttg ctgctatatg ttgtgtttat 300  
tattatgttt cagtaagtgt ccgccgtcgt cgtcctcgtc ctccatgtcc ta 352

<210> 8070

<211> 220

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-C9

<400> 8070

cgggagatcc aactgccgt atgcctcgtc ctcgccagcg aggtcacgat tccgcagtct 60  
ccgagggcac cactcgggtg cgacaagttc acctcctctt aggcgtgttcg tcggccgttt 120

ctcggatcta gccgtacggg tgcgtttatg gccgtgtaaa cctcgtcgaa tcgtaccga 180  
 tgtcactgta ccgcccgcaca tgttacaggt gcctgcctca 220

<210> 8071  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-D1  
 <400> 8071

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 caaaaattct tcaaattaaa ttaactaaca acctaacaat aattgtaaaa ggacaaaggg 120  
 gaaaaggagg aaaattaaaa ggaaaaacca aggattttga caaacattca ttaagggggtt 180  
 aacacgtttc ccaaaaataa aaggaggaaa aatcctggac tgaccaacat cagtccaaaa 240  
 attttgtttc agtttaggtc caaatTTTTT gccaatTAAG ggTTTact tttccctaaa 300  
 aaaaaaaaaa aaaaaaagga aaaaaaaaaa aaaccAAAAA aaaaaaaaaa aaaaaaaaaa 360  
 aaaaaaacCG gccccccaaa a 381

<210> 8072  
 <211> 68  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-D10  
 <400> 8072

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 aatggagc 68

<210> 8073  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-D11  
 <400> 8073

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 ttaacggata acctaaagaa gaattcaatt atgagaatac tgccccgctt tttcccactg 180  
 ttgattgata tgaatcgctg cgaacatagc tctggagatg ttcaacacgc gctgtacaaa 240  
 atcttcaaat catcaatagg ccctatgata gaagtataat ggcacattcc cgtcctgcta 300  
 ggcgcacaat tttgtgacaa cattctgaca tcctgaatga gcccttcctt caggatcctg 360  
 gagttcaagt gcatattact agtccagata tcatgtataa agaggaaaat ac 412

<210> 8074

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-D2

<400> 8074

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 aactcaaaca agtacaaggc gatgattcat ggatgtttga ggaaatttct gtatcaccta 180  
 gatcattatg tttgaatgag gaaggtgaaa gtgtcgtctt tgagcatagg gaatctggat 240  
 cttgtgttga gcacagggaa tctggatctc ctgttgatga ttacttacc catgcaattg 300  
 gttcgtgcga agagagtaaa atttctccat atttccttga tcttgatcca agaacttcag 360  
 ggaagaaatg tcaagaagta gaccattgga atcataaacg acatcatgac tgtcctgccg 420  
 gagactgtaa tgaccagaat gaattt 446

<210> 8075

<211> 437

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-D3

<400> 8075

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tcaaatgatc aaaatgataa aggaggttta ggtgggtttt tgggcaactt tggaaggggtg 180  
 ttgggctgca aactaacga agccttttcg gtcccctcgg taaacctttg agtatcaaac 240  
 gaagtcaaaa tggcacgaaa cttgacaggc ggtctaccgg tagtgaacca aggccgcatg 300  
 gcaagtctcg gtcaaatccg aaaatgttta acaccgcac acgaaaaang aggtagaaag 360  
 ggacaccggg tgacatanga acgccggatt gcaaaacgga caacagggaa aatgcttgga 420  
 tgcataaac gaacatg 437

<210> 8076  
 <211> 166  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-D9

<400> 8076  
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 cgggtgggaat aataagaagc cgtgaagcct ccgccggaac aaaaccgggc acgggaagca 120  
 agaacatgcg acacgaccgg cgctgccttg ggccgctgga gcaaga 166

<210> 8077  
 <211> 242  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-E11

<400> 8077  
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 gtcacagagt tctgcgtctt atatatcctc caagtgagcc tttagctgat catagttcag 180  
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 ga 242

<210> 8078  
 <211> 451  
 <212> DNA



<223> unsure at all n locations  
<223> Clone ID: LIB104-039-Q1-E1-F1

<400> 8080

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agcaaaccac aggaacaac aaaaccaaatt attatatata aaaaaggct ccgcaattta 180  
cagatagtaa tttgcaatac ttccttcctt gcttccattt ttgtatggcc tctcaaagct 240  
tgcttttgtt caagctggaa ttgtatcatt tctcgaaaac ttgtcacctt gaacatgaaa 300  
ctattggttt gcacagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagcgg ccg 353

<210> 8081

<211> 348

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-039-Q1-E1-F10

<400> 8081

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aatgtgaatt ggaagaaccc ttgatcttga ttcattgaca gaaagtttcg aacatgcatg 120  
cagtagttaa agtgtagag atggctctga agaagcaaaa gcctctactg attgttgctg 180  
aagatctaga aagtgaggca ttgggcactc tgattatcaa caagctccgt gcaggcatta 240  
aggtctgtgc tgtaaagct cctggttttg gggaaaacaa gaaagcaaatt ttacaggacc 300  
ttgctaacct tactggcgga gaagtcataa ctgaagagct tgggatga 348

<210> 8082

<211> 284

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-F12

<400> 8082

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aaggcaatgc cgagtcctaa ttttacaaaa gtccaagaag acaattgtac ttcgtcaaca 120

tgtgccattt gcctggaaga ctacagtgtt ggtgaaaaga taaggggtgct gccttgtcgt 180  
 cacaagttcc atgctgcttg cgtggacctg tggctcacat catggaggac attctgccct 240  
 gtatacaagc gagatgcaaa tgctggaatg tcaaatttcc ctcc 284

<210> 8083  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-F3  
 <400> 8083

catcattggg taataataat gaaccaaacg gaacaaggtc aagttaaagt gaacaaaggg 60  
 ttccaaaaaa ttggaccgct gtagatagag ggggaagggtg atggaaatgt tggatgaagat 120  
 ggcggagggtg ttggtgaaga tcgtggtgat gatgatggcc cccggtggca ctccggcgcc 180  
 accggaagct agggggagag agccccctt cttcttcttc ttcttcttct tccttgacct 240  
 tctccctaga tgggagaagg gtttccgctc cgggtccatg gtctccacgg ccgtgggagg 300  
 ggcgagaacc cctcctgaga ttgatctgt cactctgtct ctctctgttt ctgcgttctc 360  
 tctattctgc cctt 374

<210> 8084  
 <211> 383  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-F9  
 <400> 8084

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 gggagcaacg gacttcggcg caatgccgca atgtggaaag accggtgtgg agcacgctct 120  
 cttgggctgc gccaacgtct acgacaactg actcctctaa gccgtggctt atgggggtgtg 180  
 tgttggtata agccacagcg tgtgtggtca ggctcgtcac gcgcgacgga ttcacgcggg 240  
 acgtacggga cgcactgatg cattcggact cgtcggacac gactgatgcg cgcaggacat 300  
 gcgggggtgca acggaaacgt ggcgtgtgtg catgtgtggt gtgcgtgtgt gcgcatgtat 360  
 gtgtgtagcg tagtggccac gct 383



<210> 8085  
 <211> 53  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-G1

<400> 8085

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<210> 8086  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-039-Q1-E1-G11

<400> 8086

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 tagtaccagc agtgatctgt attaggttgt agtagcacta gtaatagaag tagtagtagc 180  
 gtcagtttta gcaggtgtgt attttggatt ggtgacacat tggttttggg gtgccggcga 240  
 taagcgggtg agatggatga acaagcaaga gatccatgtc tagtagtagt agttggtttg 300  
 ttagaagcaa taagtgggtc tctttcggag gcgagagaga tgtttttagct gttttagca 360  
 agcgctagag atgataatgt tggagtgaat tgaggctaata ctcaaa 406

<210> 8087  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-039-Q1-E1-G2

<400> 8087

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 tgacaccaca caacagatat gctgctgtca gcagtcctct ctaaataagac actgcaatta 120  
 tcgtataagt acatcattgc tgctgtcagc agtgctctct aaatagacac tgcaattatc 180

atgtacatca ttgctgctgc aatgaaccat taagaattat ttaaaatcta gcoctaccatc 240  
 tgcgttgtcg tcaacagagg gttgaggcgg agttacaaaa tctgtatgag aaaccgaggg 300  
 attgtccgag tcagcgacat ctttgttata ttcagagctg tcagaagcag ctgagatgac 360  
 gtcacctgat tctgaatgtg ttctgtcnac atatgcttca agtaaggagc tctcggccac 420  
 gtcagcatcg ccgttatgcc g 441

<210> 8088  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-G4  
 <400> 8088

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 gcaaacaagg cctaggaaat caagccactc tggggagcag cgacaacctt tcagtggcaa 120  
 tgggttttga cattgccttt cacgatcatc ccccgatta gtagtgattg agccagcgga 180  
 tgtgctggta gcaacacatc attctgcctt tgggtttgtc agttcggtac ccattatata 240  
 tatgtttttt tctctagcca ttgctattct ttttagtggt gcgccaacg aaagcattgg 300  
 agtggtgcca aatttttgcc atgtgccctc ttgtacagta tatcactgct caatcatttc 360  
 gacttaaaat gaaagcggtg atgggtatag atttgtgttc tagacccatg gaagatgcta 420  
 tgggaacct 429

<210> 8089  
 <211> 175  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-039-Q1-E1-H1  
 <400> 8089

aaaatgccta ttcaagtatc cttttaagct attcaaaaat tcagtaaaaa tttcgattaa 60  
 aaatatgtca tcgatatata atatcaaaaa cgctacagag ctccactca ctttcttgta 120  
 aatacaggct tctccaaaag tccgtataaa accaaaaggc tttgattaca ctatc 175

<210> 8090

<211> 355  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-H12  
  
 <400> 8090

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 atgtctacgt accatgctac tcagagcttc cagcccaaga aacttcagtt cagtgaatgc 120  
 caacttctgt tcaatgtgca tctgtggttg ttctgctgcg atatgctgaa ccaccttgta 180  
 tatcacgcta gccggagtca tccgtgtgac cagtccagga accctgccat ttttactttg 240  
 tcgatgcaga gttacgttcc tgtactaacc taaaactctt caccatgttc ctagttaaat 300  
 accttgttta agtttgctat atacccttta tgtaagattt gatgagctaa aacaa 355

<210> 8091  
 <211> 440  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-H2  
  
 <400> 8091

acggggacgt ggtgaggctc aaactgcaag gagcatgcgg ggtgtgcccg agctcgggtga 60  
 tgaccatgag gatgggcatt cagcggcggtt tgatggatga aataccagag attgctgcag 120  
 ttgaagctat cacggacaag gacgctgggc ttaagctgaa cgaagagaat gttgagaagg 180  
 tactcgatga gatcaggcca tacctcaccg gtgcaggagg cggtaatctc aggtttgtcg 240  
 cgatcaacaa attcttcgtg aaagtccaac tcaagggccc tgcagcaggt gtggcgggccg 300  
 tccgagttgc tatagcacag aagctcaaag agaagatccc atccatcgca gctgtccggc 360  
 tactgccgta aacttcaact gcaaaacatt gctgtgaata tctggttatc caggagaatg 420  
 ctatgaatgc gctaactgat 440

<210> 8092  
 <211> 379  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-039-Q1-E1-H3

<400> 8092

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 tcggggccgg aaacaaaacc caaccggccc ttccaacttc aacaacggcc ggcaatcaca 120  
 atgggtttttt ggaattggtt gccgggcaag aaggccaacc aggaccatga ggcaggctcg 180  
 tcatcaacct caccagaaac cgcgccacc tactcaacct cactgatggc attctcaatc 240  
 tcccacctgc agctcggccc cgcttccggt cgtacgttaa ggtggaggta tgccgatggt 300  
 actggcagac ctgcaccccg ttgtcgtggt ctgttgccaa gcccgccccg cgagccgcgt 360  
 gtgcgtgtgc cgagccac 379

<210> 8093

<211> 395

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-H8

<400> 8093

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 aagcaaaatc acgagtaaaa ctcaaataag agatctaacc agaaagttca acttaagaac 120  
 tctggttcgc aaaaagaatc aaatcaaacy aagcaagaat actcaagcgg tgagagaaac 180  
 aagcttcggtt tattaatctg gactaaggtc aaattttaca gtagcaaaaa cttgtttaag 240  
 ttggataaac ggaaagaggg ttctgagacy aaactctagg cgcttgaatc gcctgattcc 300  
 gataaatgag cgaaaagtta tactagaacy aaaatcggat cagaaatcac gaanaaaaaa 360  
 gcnaaaccag aaaaaaaaaa aaaaagcggc cgctc 395

<210> 8094

<211> 449

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-039-Q1-E1-H9

<400> 8094

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ctgcacgtgc anggggacat gtcggtgttc ttcaactgca ggttcgangg gtaccaggac 120  
acgccgtacg tgcacgccaa ccggcagttc ttccgcaact gcgaggtgct gggcaccatc 180  
gacttcatct tcggcaactc ggcgggcgtg ttccagaact gcctcatgac ggtgcggaag 240  
cccatggaca accagggcaa catggtgacc gcgcacgggc gcacggaccc caacatgccc 300  
accggcatcg tgctccaggg gtgcaagatc gtgccggagg acgcgctgtt ccccgtcagg 360  
catacgggtg ctagctacct cggacggccg tggaaggaat actccaagac ggtgatcatg 420  
gagagcacca tcggcgacct catcaagcc 449

<210> 8095  
<211> 421  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-040-Q1-E1-A10  
<400> 8095

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tcacgtgggc aatgccttgg tgacggcaaa atgggtgcat tcgtccggtg acacagattt 120  
gctatggccg cagtgacaag gtaggtatca gtttcgagat ctacggtttc aagcatcaga 180  
aggtatctaa atagggtgaa ccttgtcaaa gaatggtcac atattatact ctctgaatat 240  
catcctactg aaagtaattg aagccttgcc ttcacgatca tcaaattggtt gcatctctaa 300  
catagtggag cacaatttta tgataacata gactcaaaaa aggaaaaata gacagagggt 360  
ttagaaccct agacgccacc ttctccacct cgctcctcct ccgggtgccc tgcactgctc 420  
c 421

<210> 8096  
<211> 387  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-040-Q1-E1-A11  
<400> 8096

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ggacatcggg gccgcaatgc aatttctcca atcaaaggct ctctgcatga tgccagtctc 120

ccttgccatg gctatctatg acacacaaca ttcacaggac ggccaaccag tgaagcctga 180  
 acccaacaac actgcctagt atagtaacag cagctgcaac acccatcccc gcagctgcta 240  
 gtaggcatgc atgaacctgt tatcaaagtg ttaagataaa aactgctggg tctgatccac 300  
 taactacaag gagggctggaa aagacctaaa ggatcctctc cactggaagt tgtatcgacg 360  
 gtatatgatg tcacctacta acccttt 387

<210> 8097  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-A12  
 <400> 8097

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 gccgccgccg ccgcatgtc agggaggaag aagaccgca gccaaggag gagaacgtga 120  
 cgctcgggcc cgccgtccgc gagggggagc acgtcttcgg cgtcgcgcac atcttcgcct 180  
 ctttcaacga caccttcac catgtcacgg atctgtccgg gagggagacg ctcggtccgca 240  
 tcaccggtgg catgaaggtc aaagctgac gtgatggatc atcccccttat gcagctatgc 300  
 ttgcatctca ggatgttgct gtaagatgta aggagcttgg aattactgct ctgcacatta 360  
 agctccgtgc cactggtgga aacaagacaa aaactccagg tcctggtg 408

<210> 8098  
 <211> 364  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-A2  
 <400> 8098

gggtcgacgg cgcagcaatc cttgagtacc ttactgctga ggtccttgag ctggccggca 60  
 acgccagcaa ggatctcaag gtgaagcgta tcaccctcgc ccacctgcag cttgcgatcc 120  
 gtggagatga ggagctggac accctcatca agggcaccat cgctggtggg ggtgtcatcc 180  
 ctcatatcca caagtccttc atcaacaaga cctccaagga gtgaatgaaa tgcaataacg 240  
 ggtagttggt gtgcgttgta tcttcgtgat cccctgttat gttgtgctat ctgttatgtg 300

ttgctattat cacaacctga ataggttgtc tgaatttgtg atggggctag ctttcggtaa 360  
cttg 364

<210> 8099  
<211> 378  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A4

<400> 8099

cgggtcgacg gggcttggta gaaggaggtc atgatgttga tattgcggac cttaaagtcc 60  
agatgtcatc ggctgttgtg ttccttcaac tttcatggct gaagtaacct tttgttcagt 120  
aatctgcgta attgttttct gctttttttt tgagcttcta tcatgaagag ttgtagaata 180  
ataattagcc gcagatgggt aagagaaaac aaagtgccgg tattcaacag gtgctgatgc 240  
tgaacttttg gttaaacaga gctcagtgtg ctatgttagc aagggtgtat gaaaaccag 300  
catccttttt ttggatccca gtggtctctg gttatgtagg gtaaaaatgc tatcaatagc 360  
agaattctgg cttggtgt 378

<210> 8100  
<211> 343  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-A7

<400> 8100

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tgggatattg ccatatttcc tttcaacttt cgcaaataca cttgtcttca tctttggtgt 120  
atgatcccggt ctgaatgctt tcttccactt ttgtgcattg gtctttaagg tgaggatcatc 180  
aatgaacaac ggctcctcct taatgtctac gccatcttct tcatcttcac aataaatgtc 240  
ttcatgccat ggctcgctt ggctgtcaat cacttcttga ttgttgtggg tgccaatgtg 300  
ctcgacacca tgatcttggc tgtgatcgcc ttgacttttg gtc 343

<210> 8101  
<211> 367  
<212> DNA





ggcgggtattc cccttcatcg ccgtgcacga ggagtaccct taggctccgg cggcgatcaa 180  
agagacggaa tccatggcgg ggttgcagcc gctcgcgccg cctgctcgcg acgtccggac 240  
caactggctg ctggcgcgct ccgtgatgca ggtgctcttc tcgaagcacg gcgagctcag 300  
acgcctcgac aacctgggtg cctccctctg cggcgccagg attccctgca gcccgaaggc 360  
gctggacctc cactccggca gccatagga 389

<210> 8104  
<211> 292  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-B3

<400> 8104

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tactgaggaa ggatcttata aagctcacga cgtccaagct gtgaaatgtc gaccgttata 120  
ctgctctgtg ttatcctctg aaatgtcaat tgattcatcc ttggatcctc atcattgtac 180  
aattattatt ttctcttttg cccttcgtca caatagcact ctgagtatct gtaactgaag 240  
gatttcagcg gatgtgtagt acatgagagg tctctgtgta aattggttct gt 292

<210> 8105  
<211> 292  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-B4

<400> 8105

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tgatcgcggc gccgagcctg ttggaaccgc agccctctct cactctcggc tagaggaaga 180  
agaagacaca agacacgaga ttttccggtc ggcgcacgaa cgccgccacg ggcgcacgaa 240  
cgcccgaatc tttttcctct ttgcaatgtc tacatggtgc tcaactcagt ac 292

<210> 8106  
<211> 385  
<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-040-Q1-E1-B5

<400>       8106

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cgctccatac ttccagccggc gtctggagcg tggcgacctg ccaaaggatg tcgcgagaga   120

gggagcccat caagtagcct tggagttggt gctgttggtc gtaccagagg gatcgtgcaa   180

agttgaccac ctattcgtct ttgtcgtcct tggatgatgg gaggggtggc ggtagtgccg   240

gactctttgc gtcaagatga tgttccattt gcgcgccctt gttctggggc agaagatag   300

ccttcagaa caggaaatct cccctcacca ggttctcttg ggggtggcgat ccgagaaaagg   360

aattgttgga agtggatgat tgggc   385

<210>       8107

<211>       377

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-040-Q1-E1-B6

<400>       8107

ccgggtcgac ggggtacaaa atttgaggca cgttccatag atttcaggcc atatattagt   60

ccaatctata aagctatatt gggccgcttg gcgaatcaag atcaagatca ggaagttaaa   120

gagtgtgcca tatcttgcat gagccttggt atcgctactt ttggatgatg tctccagagt   180

gaattaccgt catgccttcc catacttggt gataggatgg gcaatgaaat aacacgactt   240

acagctgtca aggcatttgc ggtgattgag aattcacctc ttcggattga tctgtcatgt   300

gtcctggacc atgttgtttc tgagctcaca gctttccttc gaaaggccaa cagagccctc   360

aggcaggcaa cattggg   \*   377

<210>       8108

<211>       418

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-040-Q1-E1-C1

<400>       8108

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 aggagtatga caacccaag gccagtgcg ccaagaaga acaaataggc gagggtgagg 120  
 agaatggcga ggatgatgag gaagaacaag aggagcagga cgggtggagga ggtgacgcg 180  
 atgatgatga tgacgcgat gatgacaatg aggacgcga cgatgatgac gacgatgtcg 240  
 ctgctgaaga cgatgaggat ggagtagaag aagaggatga cgaccaggac aacgcgatg 300  
 atgaggaaga cgatgcgaa gactcgctcc agccccgaa gaagaagaag aagtgaagcc 360  
 cttcgacgcg gctgctttag gtcacatgca atgagatgtg cctgttcttc actgtgtt 418

<210> 8109  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-C10

<400> 8109

gtagcgtcct acattcaagg gtcgacgggc aatggaggat gtaggtgtga tatgtcaagt 60  
 agtggacaga taagccaacc actggatgtg gttttgaggg atttttgcag tggggtttgt 120  
 acggtgctat gccgcgctgg gtttgggatt tgaaataaaa cgaagggaga tgtgccacgc 180  
 tcttaaattgc cagtcttctg ctctaatttt gctaaattta tgcattctgt tacattctgc 240  
 agccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaaatttta aaaaaaaaaa aaaaaaaaaa aaaaaaaagg 360  
 gggcccccaa aaggttccaa ccttaat 387

<210> 8110  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-C11

<400> 8110

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 agatgagcag ggacgagcgg gagtgggaga agccaacgga gttcgtgccg gagcggttcc 120  
 tgccaggcgg cgcgggcgaa gctgtggatg tgaccggcaa ccgggagatc aagatgatgc 180

cgttcggcgt gggccggagg atctgcgccg ggctgggcat cgccatgctc cacctggagt 240  
 acttcgtggc caacatgggtg agggagttcg agtggcagga ggtcgccggc gaggaggtgg 300  
 acttcgccga gaagaacgag ttcaccgtcg tcatgaagaa gccgctgcgc ccacgcctcg 360  
 tgccccgaa ggctgagac aaagtccatc tccatcagcc agtaatcaaa tccgaacaat 420  
 agtcactc 429

<210> 8111  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-C12  
 <400> 8111

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 cacgtgggca aggccttgggt catggtgata tgtgtgtatt cgtccgggtga ctcagtataa 120  
 cgatagcctc tgtgcacagt gatgtttcag tttctacatt gatggtttca agcataagaa 180  
 ggtttcataa ttaggtgagc cttgtccagg actggtcaca tattatgctt tctgagtttc 240  
 atgctactga aagtaattga agctttgcct tcgcatgta agaatggttg catgctgtta 300  
 aatagtggag cacatttttt tgataacata gactcaaaaa aggaaaaata gacagaggggt 360  
 ttagaaccct agacgccacc ttctccacct cgctcctcct ccgggtgccc tgcattgctc 420  
 ctccggggcg tt 432

<210> 8112  
 <211> 293  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-040-Q1-E1-C2  
 <400> 8112

cagctaaacc caagctccag tgcctacaag gtcacatcg acttggtcgt cgaaaaatac 60  
 ttcagataga atgaactacc agctaactat gagtggtaaa ggaccaaagg ggaaaggagg 120  
 aaaaatagaa ggaagaacgc aggattttga ccaacaatca gtaaagggtt gacacgtgtc 180  
 gcacaaatat aaggatgaaa aatctgggac tgaccaacaa tcagtccaca gattttgttt 240

tcagtttagg tcgaattttt tgcccaataa cgggttgaca catgtcgctg aaa 293

<210> 8113  
<211> 408  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-C3

<400> 8113

gggtcgaggc gggatactaa tcgagaggtc tcgagttcaa atctctagct gatagaaaaa 60  
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cttgcatttc gtcgttggcc taccatcgt agccccagtc ccaacgccag gacgatggcg 180  
gccgcgggac ctcttatctg ccgcattctg cggcagactg gcgggggttc gcacagggtta 240  
ctctttctct gggccggccc acacagaagc agccggtggt gaaaaaaaaa aacgcataaa 300  
aagatacatg ttttgaaaac aaactgcatt cgaacttcta aaaaagttaa gatctgccgt 360  
ggattatgtt cttatagtgt ttgctgctta atattgggaa agaacgtt 408

<210> 8114  
<211> 462  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-C4

<400> 8114

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gctgaatgga ccgaagccga actccctaaa gaggtagggc catactccaa ttggattatg 180  
cacttcgacg gctctaaaat gttagccaga ttgggggctg gcgtcgtatt gacgtccccg 240  
accgggggaca cagtccaata cgtacttcag ataattgtaca cggactccaa caatgcagcc 300  
gaatacgagg cccttttaca tgggtctccgg atggcaatct ccatgggcat tcaacgccta 360  
gaggtgcgcg gggattcaaa cctcgcaata tcccaaataa acggagactt tgacgcaaaa 420  
gattcgaaaa tggcagcata tcgcaacgct gtcctaaaca tg 462

<210> 8115

<211> 315  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-C7  
  
 <400> 8115  
  
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 gctcacgaga aaaaattcaa taaatctaag aaatgtgctt ttgcgtagat tatttttgct 120  
 gtagatcaat agacaaatct cctaatactt cctatttttg taggattttt ggagttccag 180  
 aagtattcga aagttacagc ttgctacaga ctgttctgtt tttgacagat tctgcctttc 240  
 gtgtgttggt tgcttatttt gatgcatcta tggctagtag gtaagggtat gaaccataga 300  
 gaacttgga tacag 315

<210> 8116  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-D11  
  
 <400> 8116  
  
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 ttgctacaga ttgttctgtt tttgacaaat tctgttttac gtgtgttggt tgcttatttt 120  
 gatgaatcta tggctagtaa aatagtttat aatacataga gaagttggaa tacagtaggt 180  
 ttaacaccaa tataaataaa gaaggagttc attacagtac cttaagtagt tctttgtttt 240  
 ctttctctaa cggagctcac aagatttcta ttgagttttt gttgtgaagt tttcaagttt 300  
 tgggtgaatt ctttttggtg gattatgaaa caaagagtgg caagagccta agcttgggga 360  
 tgcccatggc accccaaga taatccaaag acaccaaaaa gtcaaagctt ggggatgccc 420  
 cggaaggcat cc 432

<210> 8117  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-D3

<400> 8117

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tcctgaaggt cgatgattct ccttgtatgt tcttgtatgg atgcctgctt tccttctgtc 120  
tcttgctttgc aatgctttgc tcgtcgtgaa gacgaacagt acaaataacg tgttaaaacg 180  
tgaagatgaa atcgaataga gggcaccggc gggaattgat ccaccgccgg tggttgaaaa 240  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaagaaa aaaaaagacg ggaaaaaaga ggagaaaaaa aaaaaaaaag 360  
gggggcccccc aaagggttct aagttttatt tcccggtaa ggaaa 405

<210> 8118

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-D4

<400> 8118

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accaggcccg cgagtacgcc gacaagaacc ccaacttcgt cggctgtgtt gagggggccc 120  
tcggcatacg cgactggctc gagtccaagg ggcatacta cattgtcacc gacgacaagg 180  
aggggttgaa cagcgagctg gagaagcaca ttgaagacat gcatgttctg ataaccaccc 240  
cattccaccc agcctatgtt actgcagaga ggatcaagaa ggcaaagaac ctcgagctgc 300  
ttctcacagc tgggattggc tcagaccata ttgatttgcc agctgctgct gctgcaggct 360  
tgacagtggc tgaggttact gggagtaaca ctgtctctgt ggcagaagat gagctcatgc 420  
gcatcttgat t 431

<210> 8119

<211> 335

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-D5

<400> 8119

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ggcagtggcg cagtcattggt ttagatatga aagtttttggga caccgagcgg aactcagtgg 120  
agagcttata tatgaaaact agcgagagag agagagagag agagagagaa gacgatattt 180  
atgcaattag aagagaacta tagacattgt ttttccccta agctcaataa ggtctgtgtc 240  
ctttgtggac tgcgttttctt ctttgttagag acagaacata atataatacc gaggattgca 300  
gtcaaatgga aattaatttc aggttttgga cttga 335

<210> 8120  
<211> 274  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-D9

<400> 8120

acggggcgac atgagcatcc gagtggcagt gcttcgcact ttgagcagta gggataacttg 60  
atcatagggga aagggaaggg agatgagttc gtgcttgcac gatttttagg gaaagagcgt 120  
gtgtattgta cttctatgtg catgaagtgt tttgtttggg ccaagcccaa ataataaaaa 180  
taaaacacta tctctaaaac tattcaaata cttttgcatt tattatcttc tgcaaaaaaa 240  
ggggaaacaa acaatcgacg agaggggcga gctc 274

<210> 8121  
<211> 265  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-E1

<400> 8121

ggtccacggc gatcttgtgg ggcaattagc agacctgggc gaagcagatt acacagccgt 60  
caacagagct ctgtgtgcaa tgtgccagta caatgccagc ggcagctacg tgggtctcgga 120  
cctgtcgaac gatccagaca tcaggaaggc taccatggag gacatagcgc atcaaataccg 180  
ccagcaatgg tcagctcacc gtccgacgtg atcaacctgt cgtactcagt acaaccagtg 240  
gttttccatt tgggggttcg tgaag 265

<210> 8122  
<211> 454  
<212> DNA



<213>      Triticum aestivum

<223>      Clone ID: LIB104-040-Q1-E1-E10

<400>      8122

taggcgtcga gaattcaagg gtcgacgggg gaaccgctac atcgcgccgc cgaacctggc    60  
ggcgaagctg atcacgaagc ggctgtacgc ggaggaggcg gagtggaaga actgggtgtg    120  
gcactcggag ggggacctga tgctcaacga cgccgtcttc gccgacagcg gcggccccaa    180  
ccagaggaag ttcgagaagg atgacctcat cccgcccaag ccgggatcgt acgtcaccag    240  
gctcacgcgc ttcgcgggct gcttgccgtg caagcccggc aagccctgct aaaccttggc    300  
ggccccgccg gccggccgga gccgatccct tccgaatctt caattctata gctttgttca    360  
attcttttac tcaaagattc gtgtatgtaa tactaggaca tttgagtagt ctaccgggtt    420  
cagatcagaa ggcctgtag gttgttcttg tacg                                      454

<210>      8123

<211>      181

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-040-Q1-E1-E3

<400>      8123

acggctacat gaaagtctga tcgattcgaa gcaggttgag ttcagttcag ctagaggaag    60  
acgaacgcgt ttcgatcagt ccgatctcct gctcctttta catgatgatt actattatct    120  
taatcttagt gcatgtgtat gtaatatgca ccatgaattg gtagtgcaaa aaaaagaaaa    180  
g    181

<210>      8124

<211>      355

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-040-Q1-E1-E4

<400>      8124

tcccttcaat tatatttact ttacatataa gttttgtctt aagtcaaact tcgtaaagtt    60  
tgatcacatt agaggaaaaa atatcaatat ttatactatc aatcaatatc attgcatcac    120

ggaattaatt ttcattattgt atatcttttc tattatagat gttgatatat ctttaataata 180  
aaactgggtca aaattttatta aatttgactt aaaacaaatt tatatgcgga gtaaaagaga 240  
aacaggggga ggaagcggcg ttctgtctcc aaggcgcac tattcaaaaa cttctgaatt 300  
tttgtgtggt gaaagatgct ttgggtccct gccaaattta tcttggttgg acatt 355

<210> 8125  
<211> 447  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-040-Q1-E1-E6  
<400> 8125

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cgtcgtctcc gatccaccgc cgcttccgca gccatggtga acgttccgaa gaccaagaag 120  
acctactgca agaacaagga gtgcaagaag cacacctcc acaaggttac ccagtacaag 180  
aaaggcaagg acagcctttc tgctcagggg aagcgtcgtt atgaccgcaa gcagtctgga 240  
tatggtggcc agacaaagcc tgttttccac aagaaggcca agacaacaaa gaagattgtg 300  
ctgaagctgc agtgccagag ctgcaagcat tactcacagc gtgccatcaa gaggtgcaag 360  
cactttgaaa tcggtggaga caagaagggc aagggaacat ctctcttcta atctgatgat 420  
aacaacgtta agtttaaaaa gttgtgc 447

<210> 8126  
<211> 104  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-040-Q1-E1-E7  
<400> 8126

gctatgacac actgacctt cccatatttg catacatagc tttaaaatct gaaatatttt 60  
acaacatcag gatgttcttt gattcggtaa cattcttctc gaat 104

<210> 8127  
<211> 406  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-E9

<400> 8127

acggggctgg ttaaagagga agccgaggca ccacttttca acggtgaacc caccacagc 60  
tcattctgca taaccaaca gaccaagcaa cacaaatccg attcattccc ctccaagct 120  
ccaatccgc gaattctcaa gcgtggctgt catcatcatc acccagcatg atccgtttca 180  
tcctgttgca gaatcggcag gggaagacgc ggctggccaa gtactacgtc ccgctcgagg 240  
actcagagaa gcacaagggt gagtatgagg tgcacggct ggctgtcaac agggacccca 300  
agttcactaa ctctgttgag ttccgtacgc acaaagttat ctacaggaga tatgcaagac 360  
tatttttctc aatatgtgta gatatcacgg ataaagattt ggtata 406

<210> 8128

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-F10

<400> 8128

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attaaggatt atattgatgg gttgcctttt actactacac atgatggttt tgatgaatat 120  
aatatgtatg tgcttgctgc tctacttgc aattattatg agagaggaac tatactctcca 180  
cctctctatg tttccaatac gataaaattg caagaaactg tttatactat gcattggcct 240  
ttactaagtg tgcatgaatt gttcttttat gacatgccga tgcataggaa gagagttaga 300  
cttctgtgtt acatgatata tgttacgttg tgctccccac taaattacaa atcactgtta 360  
attaaaattg gctttgatat accttgaat ccgggt 396

<210> 8129

<211> 296

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-F12

<400> 8129

cgggcaggtt gcatagctga ttggcaggat agtgaagtgg ctgaagcccg gtgggcatat 60

tttcatcagg gagtctgtgct tccaccagtc tggggattcc aagaggaaag tgaacccgac 120  
gcactaccg gagccaaggt tttacaccaa ggtgtttaag gaatgccact cctatgacca 180  
acatgggaat tcctttgagc tttctctggt aacttccaag tgcattggag cttacgtgaa 240  
gagcaagaag atacagaacc agatatgttg gccatgggag aaagtcaagt gcacag 296

<210> 8130  
<211> 282  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-040-Q1-E1-F3  
  
<400> 8130

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aatgatattg tttgagacca tgcgttgcaa ggtattgaga gactatagtt acagcgagtt 120  
gcggcagaca ggggagagag aactgcatcc gattggtttg ttaggacata gataaggaca 180  
tcatcagtat atgctctgaa gattaggtaa cttagcacag actttgcagt ctacttatat 240  
caggttgaaa ccacgtcttc ctgagattca ccgccagtc tt 282

<210> 8131  
<211> 394  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-040-Q1-E1-F4  
  
<400> 8131

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ttggattggt tagtttcttc acgcaaactt tgccggggcc tggcctcaaa cacactactc 120  
aaattcagat ttcattcatc aagtgggtcc gccacaaaat cgctgaaccg caattcaaatt 180  
gttgcattgct tgatgagccc actctgcaca attagctgga gatgcgtgcg tgtgtgcagc 240  
ttacaagttg gaaacacagt cacagaccaa agctctggtg tttccccacc tgctgggtca 300  
gctcagacac aatttggtca ctggactaga gggaaacaga caatgcattg agctcacaca 360  
aaccaaaact ttggcacaag ttcattgatc actg 394

<210> 8132

<211> 304  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-040-Q1-E1-G10  
  
 <400> 8132  
  
 taggcgtcgt aaattcgtag ggtcgacggg gaactcaata attctagaat aagcaatagg 60  
 ggatagtcga attggtttna acaccttccc gttgtgctca atgnncaacc cttcctttgg 120  
 gtattgtntn ntagtaaaca ntnntttgca tgctgcccag ttttggtgct nncgcaaacg 180  
 atagggaact agttgcactt gaacacagct caattctagg gttnttctag tgcattgggt 240  
 tccttnngat aatacgttgg ctttttgctt tcgacatgta tttcgacagc aatttcaagt 300  
 acac 304

<210> 8133  
 <211> 141  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-G11  
  
 <400> 8133  
  
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 tttggaataa ggagtggaaa gatcctaacc ttggggatgg ccattgccct caactggaac 120  
 ttctcccgt tcacgaactc t 141

<210> 8134  
 <211> 453  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-G12  
  
 <400> 8134  
  
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 tattcctgct tagtacaagt gaaggctaga aaaagactgg gaagcgacca actagagagc 120  
 gacaacagac atgaacatgc attaaaatta accaactg agtgcaagca tgagtaggat 180  
 ataatccacc atgaacataa atatcgcgga ggctacgttg attttgtttc aactacatgt 240

gtgaacatgt gccaaagtcaa gtcactcgaa tcattcaaag gaggatacca ccctatcata 300  
ccacatcaca actatTTTTaa tagcatgttg gcacgcaagg taaaccatta taaactccta 360  
gcaaattaag catgacatta gcaactataa tctctaattg tcattgcaaa catgtttcat 420  
tcataatagg ctgaatcagg aacgatgaac taa 453

<210> 8135  
<211> 375  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-040-Q1-E1-G3

<400> 8135

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agaccaaggc cagggaagg ctcatcgcca aggaggctgc gcagaggatg aactaagcct 120  
agccttatat gtgagagcat atgccatgta gtttcccttt cagtgtgtcc tgattttgac 180  
gaggaactcg aaccctttta gcagcagtgt ggaatcgat tgtggttttc tgattctctg 240  
ttcccttctc cagacttatg caaagatcag atgaggttta cccatgtttg gattctatat 300  
agctttatgt cttttgtcga gtcaaaaaaa aaataaaaaa naaaaaaaaa aaaaaaaaaa 360  
aaaagcggcc gctct 375

<210> 8136  
<211> 207  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-G5

<400> 8136

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agaagaagat gaagatgaag aagaagaaga tgaagaataa gaagaagaag aagatgaaga 120  
tgacgaagaa gaagaggaag attaagatta ggatgtataa gaagatgaag aagaagaata 180  
tgaagcataa tatgacgatg aagatga 207

<210> 8137

<211> 411  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-G6  
  
 <400> 8137  
  
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 caggggagaat agttccgtta agggttcctt tccctgggta agcatgccct aaagtgcattg 120  
 tccggactgc gataggaaac acaggaaaaa acatctgggg gcagatatgg aaaataaata 180  
 aaaatcatct ttttttcgcc gaccaaata tcccttaaga acgctagctt ttggcttcac 240  
 ccagtctgag gtacacatcc ggctgacccg gcagtaacaa tcgcagaggt gctccctta 300  
 tgccctagcc gaattaacag gaacgtaggg cataaatata agagccaggc aaccagctt 360  
 ggccaaaact taagtcatat cgatgcatat aatggcgaaa aaaggtagat g 411

<210> 8138  
 <211> 257  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-G7  
  
 <400> 8138  
  
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 ccatgggctc ctgttcaacc accctccac gggctactgt tcatccagct ctccaccggc 120  
 aactgttcaa cccgccctcc accggtact gttcaacctt ccctgcacaa tctcttcgtg 180  
 aataccatt tctctccta gggttggttt ctctcaatat ccgatacaca cacacataca 240  
 cagatagaga gatagac 257

<210> 8139  
 <211> 228  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-040-Q1-E1-G8  
  
 <400> 8139  
  
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gatggtggaa aacttactcc acagcatgca tttcaacaag atttccagta gcacgtgtta 120  
 aggagtcgct ccagcgtgat actgtggatg tcttcccgtg cacaatctct tcgtgaaaca 180  
 ctagatctcc tttgagcttt ctctggctgc ttcgacgtgc attggagc 228

<210> 8140  
 <211> 283  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-H1

<400> 8140

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 gtacaaatgt gttccgtttt ggctccacat gatttcccgt atgttcatat gaaatttacc 180  
 gcagtgttct tttaaacatc agtggtgata cttgaaaaaa aacaaaaaaa aaaaaaagaa 240  
 aaaaacagcc gacctaagaa gaatccaaca ccgacgtccc cat 283

<210> 8141  
 <211> 334  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-040-Q1-E1-H12

<400> 8141

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 atcgaaaacc agagcaaccg ccaggtgacc ttctcaaacc gcaagaacgg gatcctcaag 120  
 aaggccaggg aaatcaccgt gctctgcgac gccgaggtcg gcgtcgtcgt cttctccagc 180  
 gccggcaagc tctacgactt ctgtccccc aggacctcgc tatcaagaat cttggagaag 240  
 taccagacca actccgggaa gatactgtgg gatgagaaac acaagagcct cagtgcggag 300  
 attgatcgaa tcangaaaga gaatgataac atgc 334

<210> 8142  
 <211> 361  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-040-Q1-E1-H2

<400> 8142

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atattttcat cagggagtcc tgcttccacc agtctgggga ttccaagagg aaagtgaacc 120  
cgacgcacta ccgggagcca aggttttaca ccaaggtgtt taaggaatgc cactcctatg 180  
accaagatgg gaattccttt gagctttctc tggtaacttc caagtgcatt ggagcttatg 240  
tgaagagcaa gaagaaccag aaccagatat gttggctatg ggagaaggtc aagtgcacag 300  
aagacaaagg ctttcagaga ttcctggaca atgtgcagta caaatccact ggaatcctgc 360  
g 361

<210> 8143

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-H3

<400> 8143

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ttattatgac acgcaccatc attgtcatat tgcttttgca tgatcatgta gttgacatcg 120  
tatttgtggc aaagccacct tcataattct tccatacatg tcactcttga ttcattgcat 180  
attctggtac accgccggag gcattcatat agagtcatat tttgttctaa gtaacgagtt 240  
gtaatattga gttgtaagta aataaaagtt tgatgatctt cagtattaga gcaatgtccc 300  
aagtgaggaa aggatgatgg agactattat tccccacaa 340

<210> 8144

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-040-Q1-E1-H9

<400> 8144

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ttgcaatatg ctaaccagct gtgtgagcgt ctaccgagcc ccaatggaga gtcaacagtc 180  
 agctgccatg agatgtcaaa gatgccgaat cttgctttca ccatcgcaaa taagactttc 240  
 gtgctaacac cagagcagta cgttgtgaaa ctggagcaat cagggcaaac cgtctgcatc 300  
 agtgggttca tggcattcga cataccgccc ccacgtggtc ctctctggat tctcggggat 360  
 gtcttcatgg gcacttacca caccgtgttc gacttcggca aagacagaat cgggttcgca 420  
 gaatcagctt gaggagtcca gagcactatg aaatt 455

<210> 8145  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-A11

<400> 8145

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 acaccgagga tgtcagacgg ttgccacgca aacacgtcga tgttcgcccg caggaaagca 120  
 acgagcgcgc tttcctatct agggtcgaga gtggcactga tggatgaagg accaccagt 180  
 ccgtctctct tggcggacac cttcttgggc tctgggtggag ctgccattgt cttcttacac 240  
 ttgccgggtg agcttgatgg tgcgtctctg acggtagcgc agcactccga agaggtgcgc 300  
 ttgccggagt gggcatcaga actcttgccg gacttggcct tcttcttccc cccggaagct 360  
 tcaacggcaa gtgacttgcg atctgtttcg ggtgctgctt cccggg 406

<210> 8146  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-A2

<400> 8146

gtcgacgggc tgcaggctgg tgtacgggat gatacgccgc tttgtctcgg ccacgggggtg 60  
 gccggtcagc cgcattccagc gctagtagtg taggctctag tgcctcctcc tcgaattgag 120  
 gtaacaacct gcgctttggg taactcttgg ttgggcgctt gactctgtat tgctcgggtg 180  
 ccaggacctc agtccatcta tccagtttagca gatcttgatc agcttgaagt tgttggtgct 240

ttttcttttag gcatttttgca gtggctataa gccggcgctt gaagcgctgc tgctcgacgg 300  
gacctcagg cacgacgaat tcttcgtccc caaggctcac ctcattcttg gagaggcca 360  
tgtaattaac atcctccgag tctcatacat tgcctgtttt tc 402

<210> 8147  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-A3  
<400> 8147

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gtcgcgccac cgcacctttc tgcctcgacg ccggtgactc tcacgtactg gcggcgccgt 120  
gacgctggaa agtttagcga actccacaca tccaaacaga cgttgatcca tcgacccgaa 180  
ccaagaatca acaccgagag ctccggcgaga tgatgtcact gaagccctct gcattccgccg 240  
ccgccgaagg ctgcaggatt gcctcaacct ctcgctccgc gctgacggcg aggtcaacac 300  
cattgcaagt aattaatatt ttgggaaact tcgttagaat ttgggtctgtg tattcgttgt 360  
atagccactt gtccagtact ggggattc 388

<210> 8148  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-A7  
<400> 8148

gcgggtcgac ggggggtcact agatagtatc attgtacctt ctctcttttt ctctcatttt 60  
tttgggcctt ctctttttta tttccttctt ctttttttct cacttgggac aatgctctag 120  
aaaatgatga tcattcacatt tctattttatt tacaactcaa tgattacaac tcgatactag 180  
aacaagtat gactctatat gaatgcctcc ggtggtgtac cgagatatgc aatgaaccaa 240  
gagtgacatg tatgaaagga ttatgaatgg tggctttgcc acaaatacta tgtcaactac 300  
atgatcatgc aaagaaatat gacaatgatg aacgtgtcat gataaatgga acggtggaaa 360  
gttgcattggc aatatatctc ggaatggcta tgggaatgcc ataataggta agtaagggtg 420

ctgttt

426

<210> 8149  
<211> 392  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-041-Q1-E1-B1  
  
<400> 8149

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tgatcctgac ggtgaagcgc gacaacatct gcagcttcat ctcgagagacc aaccccgggc 120  
acgtgcggtc gtgggagacc aaggacagcc agctgacgat ggtggcggac gacctgaagc 180  
cgcgggcggt gctgacgtgc ccggagaaga agttgatcca gcaggtggtg ttcgccagct 240  
acgggaaccc gctggggatc tgcggcaact acacggtggg caaatgccac acgccaagg 300  
ccaaggagat tgtggagaag gcgtgcgtgg ggaagaggag ctgcgtgctg gccgtgtcgc 360  
acgaggtgta cggcggggac ctcaactgcc cg 392

<210> 8150  
<211> 401  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-041-Q1-E1-B11  
  
<400> 8150

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gcaccgccgc tgcgggatcg cctgtcccaa gcagctgcc tgtaccttgc ccatctgctt 120  
caggtgcccc aactgcaccg ggcacagccc tgcttccatg aagcccccca gtttgcgggc 180  
gggcgacggc gatgcctccg ggggcgaggc taaaagggcc gcatttgata tgatgagtgg 240  
tttgtccgac gcggcggagc cggcggcgac aatggacagc acgacgcagg acagaaggac 300  
ggcgggtggc cgggtggaac ccatctatct ctctctcttc cacggcgccg gagcaagacc 360  
gaactctgta tcttcgtggg aacgaagctg aggtgaccgg g 401

<210> 8151  
<211> 420

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-041-Q1-E1-B5  
  
 <400> 8151  
  
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 tcgatggctc cggcgaaaca ggagaagatg agtggcagat tctctgaatg aaagggaagt 120  
 ttaacttcag ttgttcggtt aaaccttcac atgaccactc attgggttaa tgtcccgctg 180  
 tgtgaagtaa agacttcaaa aacctcgtgt gaaatccagg gtttccagtt ctacggaaca 240  
 agcgggtgtg ctgcttggtc cgcgtagctg cgagtcgga aaaggtagga accgttacgc 300  
 tgatcatcgg atcggcacca agttgggtcg atgggaaatt cctctgtacc ataccgtacg 360  
 cgctgttggt ggtgactgca aaatgtatct attgattggt taaaaacttt cccttggtat 420

<210> 8152  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-041-Q1-E1-B8  
  
 <400> 8152

ggtctagaac tcgcgggtcg acgggtatct gaagctagag tcttattcac cacatgatat 60  
 gtgttttgcc tggagcatct tgtatgattt gagtcttga ttttagttt accacaatca 120  
 tccttgctgt acacccttt tggagagaca cacatgaatc ggaatttatt agaatactct 180  
 atgtgcttga cttatatctt ttgagctaga taatttttct ctagtgcttc acttatatct 240  
 ttttagagca cgatgggtgt ttattataga aatcattgat ttctcatgct tcacttatat 300  
 tactttgaga gtctttttaga acagcatggt aatttgcttt ggctacaaaa ttagtcttaa 360  
 tatgataggc atccaagatg ggtataataa aaactatcat aaaaagtgca atgaatac 418

<210> 8153  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-041-Q1-E1-B9  
  
 <400> 8153

cgggtcgacg ggaaacacca ttatctatgg tttaaacttt cttttctcac aacccaacga 60  
 cgaggacccc ttgaatcatg aagccgcggc cgctctccgg gacaacccgc agaagttcca 120  
 gagaaacggt cagatggcaa tgcggggagg ctatgtcgat aacacccatt tcccaagggtg 180  
 caagtaaggc ggccggggcg gctgctatg tgcttgcttc tggcttgccg ccacctaccc 240  
 taccctagcc ctgaatgcc aaccattgca caatctgaag aaatgcgggc ggcataccca 300  
 ggaaatgtat ctatcatact tgtttgctgc aagaagatgt gactgctatt gtgcttgctt 360  
 ggtggatggt ctggaattgt cgtgtaacat gaagaagaaa tggggtgacg ttatg 415

<210> 8154  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C11  
 <400> 8154

ctgcggggtc gatgggatgc tctagggtga atcggaataa atttttgtaa tggggtagt 60  
 aggggtgagag aggagacatg gataattggt accgctgctg cttactttgg gtctgcgggtt 120  
 gttggagggtg gttgagactg ctggtattag tctgttgctc gagctgtaga gaactctttg 180  
 ctgctgctgt tacttccttc tgatgtttta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aatttaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaaagggggc cccccaagg gttcaagctt aatttcccct 360  
 tcaaggcaat ttaaaacccc ttcaaagggt cccccaat 399

<210> 8155  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-C4  
 <400> 8155

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 attttcccaa gattttggct gctattccga attactctat tattccgaag ccaatgaaaa 120  
 gtaagtagaa cctacaaaaa tggggttttc tattgatgcc ttgaataaca tatagcttac 180

ctatagacaa aaaataaaaa aaaaaaagta attatgtttc ggaaccaggc aaaaccagat 240  
 tgctgtgcc taggaaggat agctatacta attcgggtata ctcaaaatac accttttgga 300  
 caaaattgac aatctcaciaa ggatgaaata tcagtaattt tctatttact ggtcgatccc 360  
 atctttttacg gaatcaattc ctttttttga atgtacaaaa attttgggag ttcagcatgt 420  
 ctggaaacac ggg 433

<210> 8156  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D1

<400> 8156

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 gctaccgtca aggccgaaga aagcaacgca aacaaaacta aaggctcctgt ggaggagagc 120  
 agttgattta tctcctgcc tttactagtt tggagcagct atgatttgat gctcgtcagg 180  
 agttgagaac ggaaaaagat gccgattcga gttcaggcgt gggctgctgc tgcttcagtt 240  
 gtgaacatca tagtccttat ttcgcctcca cttagggttat agtttcaata tcatagttcc 300  
 aaaattcttg ttcgtgggtc cttgcttccg tgttctttct tgttttcttc tctttatatt 360  
 tttacttggt ttgtgtcgtg aatgctgtta agtttttagt gcctttctca ctccttttgg 420

<210> 8157  
 <211> 443  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D10

<400> 8157

ggtctagaac tcgcgggtcg acgggggtgg tcaaagaaac tggatgcatg ttttcattat 60  
 ttctggtgtt cgttgtactg ccatgattgc agatgaatag atatgaagtt ttctcgcaaa 120  
 aaagaagtaa gaggtttttc aatgttatcg ctgtaacgca agaataagag tcagttcttt 180  
 tgctagctcc tagaataaac tgaaacaagt tgtcccttac ccaacttatt ctaaaaatcc 240  
 aaccaaattt atcttttttag aagcctacta attaaagact taactagtag gattttaaaa 300

tttattttttg gttaggttcc tagaataaac tgggtagggg tagcttattt tacaagcccg 360  
 aaaaggccac aaaaagaata gccctaagg cacgttgctt tgattacaac tataacataa 420  
 ttcaagtaat acactttgca aag 443

<210> 8158  
 <211> 444  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-D11  
 <400> 8158

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 ccaaacgagt atttcacgga aagccgacaa ggaattccgt taataaccga ccgttttgat 120  
 tctttagaac aactcgatga atttagtaga tccttttagg aggccctcaa tgaccataga 180  
 tcgaacctat cctattttta cagtgcgatg gctggctatt cacggactag ctgtacctac 240  
 tgtttttttc ttgggatcaa tatcagcaat gcagttcatc caacgataaa ccaaattcca 300  
 actatagaac tatgacacaa tcaaaccgga atgaacaaaa tgttgaattg aatcgtagca 360  
 gtctatactg gggtttatta ctcatTTTTG tacttgctgt tttattttcc aattacttct 420  
 tcaattgaga aaaagaaaga gact 444

<210> 8159  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-D3  
 <400> 8159

gtcgatgggc atccctaaac tgagtcgtaa tattcgcgac atggaaaaca ctctcctcca 60  
 aattctacaa tgctttgatg aagggtgatg ctgatcaaaa ccttttcgag aagggttaagg 120  
 agctagcaaa gcgcattgat gaggatgggt gcagactagg catctcaaca attgattcgc 180  
 tgggtgaagct ctatgtgggc gctggagagg tggataaagc tgaatctata ctgcacaagc 240  
 tgtctaaaag taacaagatg aagcctcagt acagctcata cctcatgttg cttgatactt 300  
 attcaaagaa aggggacatc cacaattcag agaaggtggt tgaccagttg cggcagatgg 360



gttataatgg gagggtagg cagtaccagt tgctgctaaa tgcatatgtg caatcaaaga 420  
cacccgttt 429

<210> 8160  
<211> 77  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-D8

<400> 8160

gacgggtaat ttcataact aacggagctt atgagttttc tgctaagttt tgtgttgga 60  
agttttcacg tggtgga 77

<210> 8161  
<211> 394  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-E1

<400> 8161

ggtcgatggg gatcacgata atgagtctta ctatgcctcc agttgatgag aaaaagaagg 60  
tagttgaaga tggtgacaag gatcgaagat acgcaattga tgcattcatt gttcgtatta 120  
tgaagagccg gaaagtctta ggccaccaga cactagtaat ggagtgtgtg gagcaacttg 180  
gtcgcattgt caagcccgac ttcaaagcaa ttaagaagcg cattgaggat cttataacca 240  
gggattacct ggagaggagc aaggagaacc cgaacgtcta ccgatacttg gcttgatcat 300  
cggttctcca tgctgggttc ggtaacatct ggcgtgtatg cctaccaagc tactgctatt 360  
taaggatgct atattttgtg ccatggcaca ccac 394

<210> 8162  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-E11

<400> 8162

gtgaatcgga atagttgtat cgcgacctga atgaatgaaa taaacgaaat aacgctcttg 60

ttcaaccgtc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaagggg cgcgccaaaa ggatcaaacc taacttaccg gggaaggaaa attaaaaacc 240  
 cttcaaaagg gccacaaaaa ttaaattaaa gggccgtcgt ttaaaaaagt ccgaacggga 300  
 aaaacccggg ggtaacaaaa ttaaaccccc ttgaaaaaaa accccttttc ccaagggggg 360  
 gaaaaaccaa aaaggcccca aacaattccc cttccaaaaa tttgccaaac cgaaaaggga 420  
 a 421

<210> 8163  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-E4  
 <400> 8163

gtc gatgggc tgcggtatat cgactcgtct aatccggtgg tctccgcggt ccatttggtg 60  
 gccgaaatgg ccaaaaccac tcccgctgcc gcgtcgggct cgccggcggc taaacgccgg 120  
 cagccgactt tgactttgac ccccggtggg ccctggttga ctcccctgag tcaatgacag 180  
 gtggggccca gccctgttaa ttaaacagga ttagttttta ttaaatttta attaaaataa 240  
 tcaccctgac atgcgggacc cactgtcagg tttgaccag acctgttcag ttgaccactg 300  
 acgtcacact gacgtcaggc tgacgcagta attgattttc tggattttaa ttaaatcagg 360  
 aaattccaga atattattta aacttcaaaa attcataact tttaat 406

<210> 8164  
 <211> 338  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-041-Q1-E1-F1  
 <400> 8164

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 cactacctac atcaatgctc ctttggttaag ggttcttgcc tacttcgttg gcaacccaaa 120  
 cccaggccat atcagacact gagcataagc actttgccat gtagacagag aagagtgaca 180

gaagctataa atacgtacac aggaagcaaa taggtttgtg attggatggc actacatggt 240  
cataggagtg gattgcagag catgtgttct accaataatg acagcttatc tttcatgatt 300  
tttcttttgt ttgggtttgc actgaatttt gttttgtg 338

<210> 8165  
<211> 450  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-F12  
<400> 8165

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aacattcgta ttgtgaacaa gttcttgaag ggagagggtg gcccccaaac catccatgta 120  
ccatcagggg agaagcttgc tgtttttgat gctgctatga gatacaagaa cgaagggcat 180  
gacactatca tcctggctgg tgctgagtat ggcagtggaa gctcaaggga ttgggctgcg 240  
aagggtccaa tgcttcaggg agtgaaggct gtgatagcca agagttttga gaggattcac 300  
cgtagcaatc tcgctggaat gggcatcgtc cctctatgct tcaaagctgg ggaggatgcc 360  
gacactcttg gcttaacagg ccatgagcgc tacaccatcc agcttccgac tgatgtgaat 420  
gaaatcaagc ctggccaaga tgttacggtc 450

<210> 8166  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-F2  
<400> 8166

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atltcaagga tatgccagac gtacgacttg gacaagggtg atgtcctgaa gtacagggat 120  
ctggagtggc ctagctcagc ttctcgact acctagggat tctttgcca ccgatgtctg 180  
tacggtaaaa caactctact ggatgataac tgctggaggg tgatcaggct ggatcttttt 240  
tgcttgggac atggacattt aaccggcatg gcggatcatg cggtgcccgc attaactctgc 300  
cgctagctta gaaagctgag aaacgaagag gacctctgaa accgtagcaa ccccatatgg 360

tgacccccgt tgctctgtac ccagagtgtgta aatacagttt ggtg

404

<210> 8167

<211> 141

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G1

<400> 8167

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aatggcggcc tatctcaatg ccgtccttaa aatgtcagct cggttcgtgg ggctggataa 120

ggttggaccc cttagagggg g 141

<210> 8168

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G11

<400> 8168

gggtcgatgg gattcccaaa agtgaatcgt agtattcgaa taaaattgga ggacagcaac 60

caggttcatg ggcagcagct ctgggagcac aacaacaatg tactgggcta ggaacgtcag 120

ccggaagtgc agccgccgat gcacggcggc aatggatttt tccaccccct tgatgctgct 180

ggtgaacgca cacttcacat aggggtaccct cctgagtcca tgagtaactc atgcatgaca 240

actttcatgc ccccggtggt gccttgattg aagactgcga ataaagtgcg acgaataagt 300

atatacgtgg caccgggccg gccgcataata tgcattgata ctacttcgag tgatggatta 360

ttccagtcaa gatcctcaat tattttg 387

<210> 8169

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-041-Q1-E1-G4

<400> 8169

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tagactgttt gaatggaagg ctctgtgctg caacaaaacc ttgccctagt agctatatgc 120  
aatgcttagc actgaactgc tgtgacaatg ttatgttacc gtaacatgtg tgggctatgt 180  
ctgcccattg tgttgtgcta ctactgtaaa ccaattgcgt ggttgcgta gtttgccttg 240  
accattgctt gcatgcagct acaagttgct aatgaatacc ctactctaac ctccctttgt 300  
gagcgtggtg caggacattc tgccgataaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa 360  
agaaaaaaga gaaaaaaaac ccgaagaaaa aagga 395

<210> 8170  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-G9  
<400> 8170

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acatgaaagt gaaaatgcta ggcaacacgc cttccctaag ctatgtgtcg tgccggacgg 120  
gccgtggagt actcccaatt cccgggctg tgggggggag tgcgacgcga acgcggcaag 180  
ccttttcctt ttactagcaa tgtgctcgtg tgttgcgcg gatccaaagt agtagaatag 240  
taatacttgt tcacaaactt gaaagaaatc actcttgtt tgatatactc ctaatatatt 300  
actccctcta ttctaaaaa aaatgtctt ttagagatct caaatggact atcacatacg 360  
gtttatatgg acatatattg aagtgtggat tcactca 397

<210> 8171  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-H1  
<400> 8171

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ggatctcaaa tcaataagt ttcattccaa ttgtctctct atcattaagg aaccttttgc 120  
tacaaatgaa tttctcaatt tcttgcttag gagtttaatc attgctaaaa agaaagaaac 180  
tcctaaaatt tataagtgt ctgttgaaga atttaatgcc aaagatggca ctacttagat 240

ctgtttctcgc ttttatgcct agctaggggc gttaaagtat agcgctagtt gggaggcaac 300  
ccaattttat ttttgtttct tgctttttgc ttctgttttag taataaatat ttcattctacc 360  
ttctgttttag atgtgggtttt atgtcctaata taatgtttgt gccca 404

<210> 8172  
<211> 133  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-H12  
<400> 8172

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actttctcaa acgcatatac gggatcctca ttaaggcaag ggagatcaat cgtgcacggc 120  
gacactgaag tcg 133

<210> 8173  
<211> 406  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-H2  
<400> 8173

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cagttccaag gatattaagc atggcatcat cgaaacatcg acgaggagcg accaattaag 120  
gtttaacaca acatcgctg cactatgcaca gatgtacctc attaatgttg aacgtgcatg 180  
catgcatgca tgcgtcgaga cttattatta attatgtgta tgtctgtgcg tatgtgcgac 240  
tgcaaagtgt atgaaggga atagatgtta tctatgatgc cttttttttt gtttttggaa 300  
gtgggcaatt ttattaaagc atcaagcaac tttttttttt tggaaatgtg atccataatg 360  
ccgtatgttg tgcttttccc tttaggacaa atgtaattct ttcctt 406

<210> 8174  
<211> 413  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-041-Q1-E1-H3

<400> 8174

ggtcgacggg ctcaacgaaa taatcaaata caagggattc caagtacctc ctgcggaact 60  
cgaagccctt ctcacacac acgccgaaat caaagatgct gctgtcgtat cgatgcaaga 120  
tgaacttact ggtgaagttc cagttgcatt cattgtgcgg attgaaggct ctgagatcag 180  
cgagagcgag atcaagtagt tcgttgcaaa agaggctggt ttctacaaga ggatccacaa 240  
agttttcttc gctgactcgg ttccgaagag tctgtctggc aagatcctca ggaaggacct 300  
gagagcaaag cttgtctgcag gcatcccaag cagtgaagc acacagtcca aaagctgagt 360  
cgcatcttac acacacacac acacacacac acacacctct gtccaaaatc atg 413

<210> 8175

<211> 398

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-041-Q1-E1-H4

<400> 8175

ccaatgttcg aagggcgctg atgcaccgga tcgggtccgc gggctgggtc acgaccgtga 60  
cgcgacaatg acaggagctg cagcaactac ggcgatggtg ggcacacggc atgtcgcagc 120  
gggcgcgag gtccgtgatg acggcgagca ggcgacacat cacagcgctg ggcaaaggcg 180  
tggcacggca tggtagcatg gaggcgctgc acggcgatgg cggaggctgc ggcggctcgg 240  
tgtgacggcc atgtagcgat gacgagccgt atcaagacta cgggggaaat tgtagccat 300  
agtcttgatc ttgcatctgt tangggttgt tagttgcacg cgttgtgttt gtagcagct 360  
agctccatgc atggaaaaca gcaccgtcc aaaaccct 398

<210> 8176

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-A10

<400> 8176

cgggcattcg ttcaccttga tttcgagtgt gaccacaagc cagagcactc gatcctcagc 60

aagcttccta gcagccagcc ttgattacca tccgaattca ctgtggaaaa cgcaagatgt 120  
 tggatatttt gcttgccgtg caggattcgc tacagtactt ggtgtcttgc attgttggcc 180  
 atctaaatga gataagcacc agcgttggag actgtataga cttgtttcgc ggagccctct 240  
 aaatgtcgtg tttcgagtaa aagtaggtta tttttgcttc ttgaagctgt cattgtttgt 300  
 ctgcatgag ggcgtcaatg tggaaatgtt agctacaaaa agaaagcaag cgatttttgt 360  
 gtgctcaaaa tcagttttgt gaactaaggt cgcaaggagc gagctagccc acccgggct 419

<210> 8177

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-A11

<400> 8177

ttcgccgggc cacgggctac agccaacgtt gaaacgaggc gagcatcgag ggaaccatgg 60  
 agaacgtcgg ggaagcgatg tcgcgccatc tggcctcctc ttgcggtggg agaacgaata 120  
 ctctgtggc tctggctggc tctgcaccct catgaacggc acaccatact cgatcgattc 180  
 gttatcctct ggggtgcttga ccttcgacct gtacgcccc cactccgcc tgactatcgc 240  
 ctcggttgaa tctgtctgct ccatcgccca taggagatac tcgatgaact cggaggactg 300  
 caacgtgact gccgccgagg agtacatgta catcaccgt cctcatcgcc gccatctcgc 360  
 tctttcgcat acattgccac atggcccgc cgtcctcga aatctccac tcattgtcaa 420  
 accaactaag gatctccttc aacctagcta ac 452

<210> 8178

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-A12

<400> 8178

cacgggctct atgtgattca cttatatctt ttgagctaaa taattttgct ctagtgcttc 60  
 acttatatct tttagagcac ggtgggtggtt ttgttttata gaaattattg atctctcatg 120  
 cttcacttat attattttga gagtccttta gaacagcatg gtaatttgct ttggttataa 180



aattagtcct aatatgatag gcatccaaga tggatgtaat aaaaacttcc atataagtac 240  
attgaatact aagagaagtt tgatacttga taattgtttg agatatgaag atggtgatat 300  
tagagtcatg ctagttgagt agttgtgaat tttagaaata cttgttctaa agtttgtgat 360  
tcccgtagca tgcacgtttg gtgaaacggt atgtgatgaa gtcggagcat g 411

<210> 8179  
<211> 342  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-042-Q1-E1-A3

<400> 8179  
tcgacgaagc gaattcccgg tccaagggc cacttcggtt gtacgtgacc gaaggtaatc 60  
acaaacgggt gtcgtgcccc gatcagccga ttcgggaaca cgactctgtt gatccgtgct 120  
tgtcgcacga tcagtagcag gcacgtacta tatatatgtc gtacgtttgg tcatattgag 180  
tgatgaaatg tatttacggt tgtcggtggt cgggtgtcta actaacaaaa tgtatgtttg 240  
actctctgaa atgagtaagg agatccattg taatccaaat acagataaag ctattcgggt 300  
cgagaaaaaa aaaannaaaa aaaaaaaaaa aaaagcggcc gc 342

<210> 8180  
<211> 278  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-042-Q1-E1-A4

<400> 8180  
gggtcgaccg gtggactaaa ggataaggag tggaaagaga ctaagctggg ggatgccaaa 60  
ggaaccaag attatattaa aggataacca aaagcctaaa ccttggggat cccccggttg 120  
gaaccccccc ttctctctcc gtcaaccgga aacttaactt gggccaaaat tttaatccac 180  
aaaattaaaa gtggtttaac ttgggcaaca atttcccctg gtccgaattg ccttgcggtg 240  
attaaataa aggttttgca ccttaatttc cattaaaa 278

<210> 8181  
<211> 428

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-A5

<400> 8181

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gtcaacgagc ggtacagaga atattgcttc gattcattcg tatcccagaa aacatcacac   60
tctctcgctc gagagcaaga acaccagata atacaaccag acaagcagca gtaggagtgt   120
tatctctccg gagagctccg aagctgggta aactgctcgt gtgcctcgcc ttgatctgct   180
cttcgtgcga cctccgcccc ccgccgaacc gaaagggggc cggtcgccg gccccatagg   240
tgttcgcgga tcagtttccc cgacaaagta tgtgagttct ttattactaa tgtttagtcc   300
atatattata cacactetca accttcacc attgctagcc tctctagtat cgcgcaactt   360
tcgccggtac cgttacacca ctttatacct tcctcanaac agccacaata ctttactact   420
atgcattt                                     428
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<210> 8182  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-A7

<400> 8182

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gggtcgacgg gcatggccat agctcctgct gaaacatggg cagtacggaa agcctgctga   60
aattgatccc atgtgacagt gtctactgga tatgtggctg tgaaattctc ccaccatgat   120
gttgcgggtc cttcaagctg atgtgcggct aatcgcacct tctctgcatc tgtgcatcct   180
gcagtgggtca actccctagc tgtcttgcca agccaatcat ctgcaacaat cggctcagtg   240
ctaccggaga acaccggcgg attcagccta agaaaacggg ttaagtgatc aacagggtgg   300
ggtggtgggtg gggtgtgtgt gttgttcccc tgattctaatt tttggactag caactgcatc   360
aaggcattct gctactggat caactgagtg agctcctggg gggaaaagaa atc         413
```

<210> 8183  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-A8

<400> 8183

cggacgtaac taggacttta gaggcattct ctctaacacc tcacatgtgc tgatgcaggc 60  
agagatggcg gagegtccgc tgggtggctat catggtgagc tgggtgtgcta ccacctcgcc 120  
cacggccgca ggtagectcc tccccggcat ccattgtcat gaaccaggac tgaatttgag 180  
taattagata caattctcag acgctacgat ttggaggaga aactcgagct cgagtccttg 240  
gagcaagagg aaggaagaaa tgagacaggg tctcgttaca ttctcgatac cgagtcagac 300  
gggagctcat atacggcgct ctaggcgccc gtttgggaag tggcgctcac gcagccgca 360  
atttgcgccg gcccaacg 378

<210> 8184

<211> 341

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B1

<400> 8184

caacatgaac ggatacctca gctacctgtc cctcgagtat gacttcgtct cggacacaaa 60  
tcctgcttgg gtatcttcat tttggaagca ggaatccttt cctcataaga tggatgacct 120  
gtagtattag gaattcatgc cttccagctc taattttttc gcattgttgg tgtatgctgg 180  
gagtcacatt attatgctgc tagcaaacag taggattgga agtcttactc tgtagggttag 240  
taatatcttt tccactatac cgaggttcag caatttaatt cgtattaagg tcacacaagc 300  
agtttggttt tcagatttgt cttgacaaac atatttggtt c 341

<210> 8185

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B10

<400> 8185

ggggatcaac gtacagcagc aactcctggc cgcagcccaa gtccctccgc atgtacgcag 60  
ttctaagacc tcatttctct cacttctcaa cacctctccc tcgggaacaa tagccgccgc 120

gggcgcatct gcagcagcgg tatcctcacc aggagatcga tatgggtgttt gtgtctatcc 180  
 aaaaaattag ggcctactcc aagcgggtcc aagtgcggtt caggagatgg agacagggga 240  
 ctaccgatta cagggccagg ctccaggtca tcaatcaaga caacagcagg tataacagat 300  
 ccaagtatcg gtttgttgta ctatttacta acaaagatgt cactgcccga attgtgtaca 360  
 ctaccattgc tggcgatatc gtgatggctg ctgcctattc ccatgagctt c 411

<210> 8186  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B12

<400> 8186

cgggtgcacc atgatggtat gagatagtcc ttggttgatt tatagaatgc tcattgcact 60  
 tcacttatat cttttgagta tggctttata gaatgcttca tatgcttcac ttatatcatt 120  
 tgaagtttgg attgcctctt tctcttcaca tagaaaaccg ccatttatag aatgctcttt 180  
 tgcttcactt atatttgta gagaatgggc atatcttttg tagaaagaat taaactctct 240  
 tgcttcactt atatctatct agagagatga caggaattgg tcattcacat ggtagtcat 300  
 aaaatcctac ataaacttgt agatcgctga atatgatatg ttgattcct tgaaatagtt 360  
 ttgcgatata aagggtgtga tattagagtc atgctagtgg acgactat 408

<210> 8187  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-B2

<400> 8187

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 aagtggaaaa ccttcgtaaa ccaattgaaa aacccttaag gtaaaaaaat tcttgatttc 120  
 aacaatgcta aggcggcggc aaaaaaaaaat ttggagaaag cattttggat ttgcaagcc 180  
 caatttgcta ttgtgagagg accggctaga ttttgggatc aaaaaatgcc ctggtacatc 240  
 atgtacgctt gtgtgatcat gcacaacatg atcatcgaga atgagcgtgg ccaagagatt 300

tagactactc acagtatgag ctcttgggac atcccgtgcg agtgcgacgg agggctgaag 360  
 ggtancccg tttgttgctt cctatcatgc cattcggtgt cccgcaacgc 410

<210> 8188  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B3

<400> 8188

cgtgcacaaa taaatatgtc atgtgaaaat ttggaaaatt tcaggggtca tttgacctat 60  
 taaagacatt tacgtgattt tctaaccatt taatgaccgt aattcaaatt taaactacat 120  
 ctacatgcaa cgcctaacca taacggtttg aaaaagctta tttttacgta cttgtgcgcg 180  
 agttaattcc atgtgcagca aattaaaagg gattttcaaa catgttggtc tcaaagcatg 240  
 ggcatatgca tacgtatggc tggagtgcgc tggcatatta attcaaaaaa aataaaacat 300  
 gatcaaaaaa acttgaaacc ttgcttgatt taatgtcatg ccaccaagat gatgtggtaa 360  
 agaaattggc atgtttgacg aacgtttgga cacacaacc tcacaaaccg gagca 415

<210> 8189  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B4

<400> 8189

cggtcgaccg gatgccgat acatcatcat cggtaacatc ggtgaccatt ggagcgacat 60  
 ccttggcgcg cctgagggcg cccgcacttt caagctgccg gaccccatgt acaacatcgg 120  
 ctaggccact cgggcttggg catgccgcca ttgagttctc gaataagctg gacgctctta 180  
 gttatatgca tgtttagtca ataatccctc cccagttggt gcttggttca tttccattgt 240  
 tgagaacttg agattaattg ccattatagg atgtgttcat ggagaagttg catgttgctt 300  
 aatctatgga tccacggtcc actatTTTTT ttcttgcgag aaaagtcag caacaaaaag 360  
 gatgtgcgaa ataaattggc atgt 384

<210> 8190  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B5

<400> 8190

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gggccgacga cgacctctag ggcccacaga gagagtcaca catgagtgtg tgtcatagga 60
caaaaccacc gcggtgtatgt gcccgtgtgt tatgtgatgt ttgaatacc aatgcacaac 120
tttaacgtgg cacatgcttc acaaaccgga aacgcactac accatgatgc gtatctccct 180
cacttcaagc cgggtgggaga gcctcatgtg tacgcacgtg cccgaacttt aatatggaat 240
ctcaccatga tccacaccac acgcatgcc aagatgaatcc accttttggt caaatgcctc 300
tcgttgtcgg tggaaactac aaacctttgc gggctaacga atgggcacgt cgctgatacc 360
gca 363
  
```

<210> 8191  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B6

<400> 8191

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attcgccggt cgacgtggag gcgtactggc cggggaggcg tggtaaacc cgggagtgtt 60
acgcctctct taagacggat caccatcgcc ttatggagaa agcattcaga cccttcatct 120
ttgccatcct ctttgcaatc ggctcctcca agaaactttc cccccctcct cctgtagaaa 180
cccagctagc tagctagcta gcgtgcgtac gtctccggcc ccaacattca ttccatgtga 240
gcacattata ttatattgga ggctcctttt tttcttggtt tgattatttt tgtaaactca 300
cattcacata tcacgattgg atcgagtcgg atttctaaaa aaaaaaatg caagtcacac 360
acaccacaca aatga 375
  
```

<210> 8192  
 <211> 151  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-B9

<400> 8192

ggggatcaaa gtaccgcagc aaaccctaac cgcagcccaa gtccctccgc aacgacgccg 60  
ttccaaaacc ctcccttctc ccacttctcc acccctctcc ctcggaaga aaagccgccg 120  
ccgcgcgcatc cgcagcagcc gcatccgcag c 151

<210> 8193

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-C10

<400> 8193

cgggagaaga ggtcataggg tacctaggg ttatgacgtc tcgttgtttt tgcaagctag 60  
catgtgactc cgggatgcct gttttaagat ttcgcttggt ttgaaagata ttattattta 120  
ctgctttag cctacctggg ataccatcat attttgetga ttatggaact acttttatcc 180  
tgcttaagtt ctgtattttg cccgatttga aataaaaaaa aaaaaataaa aaacaaaaaa 240  
gaaaaggtaa aaaacaaaaa atcgaaaaaa attcaaaaaa aaacaaatac agaaaaaaa 300  
aataataaat catcaacaga aaaaatccgg gccacccaaa gggttcaaac cttacttacg 360  
cttgaaagcg acttcaa 377

<210> 8194

<211> 410

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-042-Q1-E1-C11

<400> 8194

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cagctgttct ggaaggtgag gcgcaccgtg ctacggctga agcgcgcac tgcgagtttc 120  
gggtataaac gctaaagcta taccagaact tcaacgacag tctcgtcact gccaacgcc 180  
tctagctatc cacaccgca ggccgcatgg tcttgttct cgtcttcgca attttttact 240  
tgccgcaagg tcggaccact gcatgaggct ggacattttg aagcgtgtcc acaacttctg 300

atatgtctct cgatctcagc taccagtgtt cgagtattag attgtactgt tcgtacacaa 360  
 cttgcatagt gtacanaatg acacagtgtataataatgtac ctccatcctt 410

<210> 8195  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-C12  
 <400> 8195

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 ggcttccatg tgcacgctct tggcgacacc accaatggct gcatgtcaac tggaccacac 120  
 ttcaaccccg ctggatcatgt gcatggggca cctgaagatg aaatccgcca tgctggatgat 180  
 cttggaaatg tgacagctgg agtggatggt gttgctagca tcaatattac tgactgcat 240  
 atccccctta ctggacaaaa ttcaattgtt ggccgtgctg ttgtcgtcca tggtgacgct 300  
 gatgatcttg gcaaggggtg acatgagctg agcaagagca ctggaaacgc tggtgacgct 360  
 gttgcttgcg gaatcatcgg gctccagggc taagatgtca tcttcgccga ccaacgtcgt 420  
 acagatatgg gaaccttt 438

<210> 8196  
 <211> 335  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-C2  
 <400> 8196

ggctgataag gagaagaggc accgcacgct tcagtggatc aagggaagg tgcaaaaaag 60  
 aatacagggc ggccccgccg gcgacgacgc gactgccggg tattgattag ccaggccccg 120  
 ttccccggcg gcggatggaa atggatgcat ggatgtccgg tcgattgact gggcgatctc 180  
 ttgtttcctg tcgtttaaat ggttctgtac atacaggttt gccgtttgat tcacggttga 240  
 caccaccacg tagatcatct agcgttcaga tctctgctta ttgattggtt ctttgtacaa 300  
 aatataanan taaaatctgt aaaaaaaagc ggccg 335



<210> 8197  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-C4  
  
 <400> 8197  
  
 acggaaagca caggaagaaa ccctccgtgc gttcgcgaca acggattctt ggtcaaccgg 60  
 gaaacccacc acttcggtta acaattaggc ggtaatacca taccagacag aaaaattgag 120  
 agtgcattgt gtgctacctt tattttttca tttcgttttg gcgaaaataa tggaatgcgg 180  
 taaggggttg gttccaggtc ccggtattag aaattcattg tagggcatca tgcctcatta 240  
 attgtgaatt gtgatcactc attttgaata acagaattca ttccaaaaaa aaaaacgaaa 300  
 aaagaaaaag acgcaaaaaa aaaggaggaa gag 333

<210> 8198  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-C6  
  
 <400> 8198  
  
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 atttgcttcg tgttgacatg aagagtaacg agatccagat ctctccacag cctacaaggc 120  
 gtatttggtta ccaactcttt gccagcgagt tcagtgcgta ccgacagcat ttacaggatt 180  
 gaccgaagag agatagaagc aagagagttc ggtgcgagtg gaaagacggt gaagatttga 240  
 gatgttggca acataacatg tggaactggg acttaaagtc cactggagac atttactggt 300  
 gtcattatct gatgttagta gttataaact gaatgggtgg tagtatgtgt tttcactcat 360  
 ggctttatgt ctactgagtg gcttgttttg gatttgtaac tggtaatggc atgtttactt 420  
 ttgtgactgc tg 432

<210> 8199  
 <211> 131  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-C8

<400> 8199

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taatacttgt tttcgccttg tactttttgc cagcatcaat cagttaatta tcagagatac 120  
atgttcagct t 131

<210> 8200

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-C9

<400> 8200

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actggtgtgc ccgccatggg aatgagagga tgagggcaga caaggcccg ctcgctaccg 120  
gcatggcggc ggcagaggcg gctgatacag cggcacgggc ggccgcataa gaacgagcac 180  
gcctcgcccc agagcagaat cgagtgggtcc gtgccatggc cggactgcca cccaagaacg 240  
agaaggtgga cagcgacggg tcggacagct tcggcaacga gcagatccgg ctaaatecgt 300  
actgagtctt cgactggtac ttccgcgaga aagacggcaa tggcgcgtat ccgggaaggg 360  
caagggcacc cgtggatgat cttctccgcc atagccgaac atgccaaatt ttggtagtcc 420  
aatggaatgt tg 432

<210> 8201

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-D1

<400> 8201

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gatgcaaggc agtaaccatt tcttgtcttc atcctcgtat tgtatagcat atagaggtagc 120  
aaggagagaga gagagagaga gagagagaga gttacactgt aacaacatac atttgggtagc 180  
ctatctatca gggcgcgggc acgtagtcac actgcatgga tagggacgtg cgttagtagc 240  
ccaggagaag ttgttttcag cataaaaaata ttcagtctaa caccgatgac cagcacaaca 300

atgtccttct cttcttcccc tacttctctt gggcgtcatc atcggcggtt ggcgagcacg 360  
gctgagtgat atatggtcac gggctcacgg cctagttgtt gaacttgagg catgggcggg 420

<210> 8202  
<211> 434  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-042-Q1-E1-D10

<400> 8202

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aaggagattg tggagaaggc gtgcgtgggg aagaggagct gcgctgctggc cgtgtcgcac 180  
gaggtgtacg gcggggacct caactgcccg ggcaccacgg ccacgctggc cgtgcaggca 240  
aagtgttcca agaggcagag gaccgcccag caataagtaa cctaagctca catatgtact 300  
gctatgtaga tgatctcatc accttgacct tttgcctttt tcatgcttgt tctttgggat 360  
gcgtgcatac gtgttgact caggttggtt attcctgtga attgttctan gagtagatgg 420  
agcgctgaga tgag 434

<210> 8203  
<211> 444  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-D11

<400> 8203

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gagatgattg cttctggttc ttgtggagac ttgttccatg ggacttactt tggcgaggat 180  
gttgctgtta aagttctaaa agccgagcat ttgaataata atgtttggaa cgagtttaca 240  
caagaagtat atattctaag ggaagttcat cataccaatg ttgtgcgatt cattggtgca 300  
tgcacaaaac caccaaaatt ttgcataatt acagaataca tgtctggagg aagtctgtat 360

gattatgtgc acaagcagcg taatgtcggt gatctcccaa ctctgctgaa gtttgcattgt 420  
gatatatgcc gaaggatgtg ttac 444

<210> 8204  
<211> 305  
<212> DNA  
<213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-042-Q1-E1-D2

<400> 8204

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attagaaata atacagaatt aaaaatttta acttgatata cgaactacaa atttaaagaa 120  
ctactaaaga gccgcccggg ttaataaaaac tgagaaaatt aactcggaaa gaaatttttt 180  
ggaagctccg ttgctgggatt cagacctaac cattcaagga gaagcagtgga gaacgacaga 240  
acctatgatt ccatangatt ttattgacaa gaatcctaac acttcattgg gtgggatggc 300  
ggaac 305

<210> 8205  
<211> 315  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-D3

<400> 8205

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tctagcttgg gatttagagg aattatgaag ggccgcccgg gttaagagaa ctgataatat 120  
tgactcggaa tgaatttttt ttgcaactcg gttgggggat tcatacttca ccattcaggg 180  
agaatcagtc gtatgtatag aagctattat tcaatagggt tttattggga agactccttg 240  
tacttcattg tgcaggagac cgggctgcaa cttaagcagt gtcttaattg gttcatgaac 300  
cagtgtacgc ggaac 315

<210> 8206  
<211> 429  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-D5

<400> 8206

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aaaatgttaa atgtgtataa aaaatgttga ccatgtat tt aaagaatgtc aatcgtgtat 180  
ttcgaaaatg ttaatcatgc tttagaaaat gttaaccgtg ttagtaaaa atgttgaaca 240  
tttataaata aaatgcta atctgtat tt agaagtgtta acaaggcatt tgaaaaatgc 300  
taa atgtgta tagaaaaaat gtggccgtg tttcgaaaa aatgttaatt ttctcttcaa 360  
aaatagttaa acatatat tt aaaaaatgt attagatatg taccaaaaac ctacaatgtg 420  
taaggaaaa 429

<210> 8207

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-D7

<400> 8207

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gcatgagctt aaacaggggt acagagaaaa gcttgtggac atcagggagg agatactgcg 180  
gaagcggaga gccgtgagc tcccaggaga cacggcgtcc actctgaagg cgtggtggca 240  
agcccacgcc aaatggccgt acccaactga ggaggacaag gcgcggctgg tgcaggagac 300  
ggggctgcag ctgaagcaga taaacaactg gttcatcaac cagcgcaagc ggaactggca 360  
cagcaacct acctcgtcct cgtcggacaa gagcaagaga aaaaggaaca atgc 414

<210> 8208

<211> 426

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-042-Q1-E1-D8

<400> 8208

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gtgtggtgtt cgtccgacga aggtttcagg tgagcgcgcc aaggaggtga gatgccagga 180  
tgccgtgtga ggcggcgagc acggcgagat gccgatggtg ctgcgtgaga agcggcaaga 240  
cgtatcagag gctggagccg tgatggactg catcaaattg ggtcgggtga accggccggt 300  
cgttctgttt gttggactag ctgttcatgc gtgagttcgt ttagtcctag ctgagagtat 360  
cgttgctagt agttgatgca tgcattgata anaaaaaaaa aaaaaaaaaa aaaaaaaaaac 420  
cggccg 426

<210> 8209

<211> 403

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-042-Q1-E1-E1

<400> 8209

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cgctcaaagg gcgggacctt cgcaacatca ngaacctcgt cctcaagatg accggattca 180  
tcgagaaatg aaatggactc aacaccgtgg gatgtggata cattgcttcg tcgtccatgg 240  
acgtgtgtga aagtttgtgg caacctaat aaagttttca gtgagcgcag aggtgaagaa 300  
agataagaga ttagtaata actctctgtt taattaatta aatttgtctg ttagtcgaa 360  
ttttgcatgt gtantgtgcg agcagcttgc tcaagaataa atg 403

<210> 8210

<211> 140

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-E10

<400> 8210

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tgatccactg agtttacaaa ccgtttgtcc ctatttggtt gcaccaacca ttgtcgggaa 120  
 ttttgtgtta acaatgggcc 140

<210> 8211  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-E11  
 <400> 8211

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 accactgctg acggcgacca atcgtttact gatctcgggt taacaagcaa gcaggaagcc 180  
 ttatttatag agcagattac tgattagggg aaaaagattg agcctcacct agggatacca 240  
 ccacttgaga ctgagttggg gttttacatg tctatacttg catatggctt ttactagga 300  
 atctaaaatt ggtctgtgtc gaagagttca aactgcgttc ttttgtgatg tggaacgggt 360  
 cgcatacctt tagtcttatg taggggggtat aaaacagtga tcagcaacgg attcaggata 420  
 tttggttatg aatg 434

<210> 8212  
 <211> 349  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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 aggattgaat aaaatcgtgt cacgaaggct cgggcacaag tgctgaagcg ccaatttcac 180  
 aagttgcaga tggagaaaac tgaatcgggtg aacgactatg ccatgcgtct gactactttg 240  
 gtgggagaga tccacgcgtt tgggtcanag ctgcagcaga ccgagattgt ggagaagttt 300  
 ttcagtccgg tgactgatan attcacgtac atcatcggca cgctcgaac 349

<210> 8213  
 <211> 362  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-E6

<400> 8213

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 gcttgctcaa gtgcccgcac aagttcttct tctgccaggg gccgccgcag aagaaccgtg 180  
 acacatgtcc caagtgcgaa ccatgagagg ttccatactg tagataacgc attcatgtcg 240  
 tataccttaa tttcatcggt tactgtatct catcggttac tgtccggatg atgaacttta 300  
 ttgatcgaat aatactacat aactttgctt gaacgcgggt aacatgccaa aagtggattg 360  
 ct 362

<210> 8214  
 <211> 353  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-E9

<400> 8214

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 atgttgcggt gcgtgggtgc tgctgccggt cttgtgtact ccattgttgt gctgtgatca 180  
 ttcccttgaa taaatcggt cgatcttcac tttaaaaaaa aaaaaaaga agaaaaaaa 240  
 aaaaaacaaa aatcagtata ccggacttaa tcagacatcc aataacatta atcggccctc 300  
 caagaggatc aaagctaaca tactccggca agctaggtca aagctctcct aaa 353

<210> 8215  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-F1



<400> 8215

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atgtcaggcg cgctctccct ctccctcgca tttccagcat caaaggatca ataggctggt 180  
aaaatgcaac cggaatcgca aagaagcatg agatgagcag tangaatata ccgtcttcga 240  
ttatccagtg atgatggctc cttgcctttg cattcctgat gtcttgctg atgcaacctt 300  
gtagcatcaa cccactgcac aaggagtctg cctaaaacac aactatcttg tcaatg 356

<210> 8216

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-F10

<400> 8216

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atataaatat cagttccaag ggacgggtctc aatgcaccaa accaccatgt actcctacat 120  
ggcctcgcaa cgatagcttt accacaacgt cttcaatacc tcaactctcat taacgacaca 180  
tgcttttcagt ccaattgagg accctgatga atcagagctt atacgattct aatcgttgca 240  
agcataacat tttaggaata cagtatggct cagacagctc ctacacatgc tagtgcgttt 300  
catcgactta ctgtggcaat gacaagtcac gcataagaaa gtgggtttaa ctaccgcagt 360  
atacactaat ttgaatcgca ttgt 384

<210> 8217

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-F11

<400> 8217

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atgatagcta ttatggccgg ttctttctca actggtatgc ccaggtgttg ctggatcatg 180

cagaccgcgt gctgatgcta gccagggttg cctttgaagg ctcagctatt gctgtcaagg 240  
 tgtcaggcat aactgggtgg tacaaaactg ccagtcatgc tgctgagctg actgctgggt 300  
 tctacaaccc atgtaaccgc gatggctatg ctccaattgc ccaagtattg aaaaagcatg 360  
 gtgcggcttt gaacttcacc tgcgtcgaac tgcgcacat ggattagcat gaggtgtacc 420  
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<210> 8218  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-F12  
 <400> 8218

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 ggcacatctt tgtgccggtc gagctagtcg tactagaaga agctgcttgt ggattaattt 180  
 tattectagc tttctcacat ctttgtgcta tcttttctgc caacatttct aatcagttgt 240  
 attgagctat ataaaaggac tattcttgag tgtgataaat acatgatgca ttgcttttgc 300  
 aggggtaaag acttggaata gaaaaatccc tcccttgga gcttggggcc tcatttgtaa 360  
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 ctat 464

<210> 8219  
 <211> 221  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-F2  
 <400> 8219

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 cggccccaac aacgggcggc ttgaagaacc ccaacggcaa aaggcccgga accgtggccc 120  
 tgcgtgagat ccgcaggtac cagaagagca cggagctgct catccgcaac cggccgtcca 180  
 agcccctgat gcgggagatc cccaggaact tcaagacgga c 221

<210> 8220  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-F4  
  
 <400> 8220

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tgcagtttca tcaggctcct cgcctacgtc gccaacctct tcttcaagct caagacgcat 120
cgccagctct tcgagccgca ggaaattgag ggcggaatg atgataagga aaaggcggtc 180
ctcggttttg ggagcgcgct cttctggctc atcctcatga ccatcataat cgccgtgctc 240
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atcttcgccc tgaagaacaa gctgggcata a 391
  
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<210> 8221  
 <211> 357  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-F5  
  
 <400> 8221

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gggggagatt tgccctacga cactgttgct cattggaaca aggagcaaca cctgggttagc 120
caacggtgac aaggtcagat gatcctttta tagagcatgt tcaaaagttc agggctcatg 180
tgggatgccc acctgaccat acgtcagggt atcaaccttt gatgtttgcg ggacattgta 240
gtgtgaacat tgtgtgtgtc ctgtataaca tgtctaagct gaaacggtcg tctgaaatcg 300
atgtggtata ggaccatgcg gtagccatcc agagttcttc acattctgat cgtagtg 357
  
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<210> 8222  
 <211> 261  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-F7

<400> 8222

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ccttaagggtt ttaaaacaag cccgttaaca ttgggaattt ccaagatttc aacaaatccg 180  
gttggaacc ttccccggaa ccttccaagt ttccccggaa cgggtcaac caccattcca 240  
ttgcgccaac cttttgcaa a 261

<210> 8223

<211> 439

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-042-Q1-E1-F9

<400> 8223

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cttcataaca ttttcttttc ttccaaaact tttctggtgc aattcacata agctcttgca 180  
cttctagtac tcaacaaatc gatgatactt aagcgtgtgt cctggcaggt tcggtaaatg 240  
tagacaagac ccggaacacc ttccggtcaa tggccaatag cagaactgtg gacatccata 300  
ttgtcccccc tacacttaca cgaattatta tcgagtgaac ctattgttct gacacacaat 360  
tccctttatt tcacaatata acataatcaa aggtgatact tattggtatc catgtgaagc 420  
aactcatgat canncatac 439

<210> 8224

<211> 181

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G1

<400> 8224

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ggcgaatcca acctccaaac ctggggagcc ggtggatctt ttttgcaaaa tgaaagcaaa 120

cttgtccaac aaaaaaaaaag ataaaaaaaaac gtaaaaaaaaa acgggcgggtc caaaagattc 180

a 181

<210> 8225

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G10

<400> 8225

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tacaaaattt tcagattact acagactggt ctgtttttga cagattctgt tttctatgtg 180  
tcatttgctt attttgatga atctatcggg agtatcgggg ggtatgaacc atggagaact 240  
tggaatacag taggtataac acaaattaat ataaatttag aatgatttca caacagtacc 300  
taaagtgggtg atttatttta ttatactaac ggatcttacg agttttctgt tgagttttgt 360  
gttgtgaagt tttcaagttt tgggtaaagt tctgatggac cacgaaataa ggagtggcaa 420  
gagcctaata ttggggatgc cca 443

<210> 8226

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G11

<400> 8226

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gcgacatcca ggaagcgatc cacgtggcgg gacgggtgtct agggcatagt agagaggcgg 180  
ggtggtgctg ggcgagctca ggcgcgccgg tgetcacctc cctgcctgcc tggcgggagg 240  
aagcagctga ctggcggtgg ccagcgcaat gctgggacgc caggtgggct cccaggtaag 300  
tttcctctc tctcagtttt ctgttaatgt ttttctattt ttctgtaact tctgggcttt 360  
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<210> 8227  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-G12  
  
 <400> 8227  
  
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 ttcattacag ttactttggt aacttgcaat gttaatcatg tgtatgtgca tgatattcaca 180  
 tatcatctga ataatatcga tcagagtctt atgttatgca gaccattcaca gtgcaggata 240  
 aatgatcaag ttgggtcaaac taccaagaaa atatttcagc tatccacaaa tgaaatatca 300  
 tggaggataa atatctatgt gagggagtgc gaatgattgg aatcttcata acaaggtaac 360  
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<210> 8228  
 <211> 292  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-G2  
  
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 tgtggccggg gtggtggagc ggcagcgaag gcaagagaga acgaaggaag gagagaaaat 180  
 gagtaggatg gagtcacgga gtccgggaag ggttttgggt angatgggggt gtcggattcg 240  
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<210> 8229  
 <211> 337  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-042-Q1-E1-G4

<400> 8229

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ttagttaagt tgatgttact gttgtttttt ctgctgccc ccatgccatg aacaggcgag 180  
gcaggcagct tctcaaactt gtgttgttgt aacttgtatg atgggagctt aagtacatta 240  
ctttgtttca taatacacca tgttctcgcc aaaaaaaaaa aaaaaacca aataaaaatt 300  
ggaaaataaa tacaattgga aaataaagcc ttcccc 337

<210> 8230

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G6

<400> 8230

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cagaatgggg atagacccta caaaattcg ccgtagcagc acttccttca aaggagtgaac 180  
gccaggcctt tacaccaatt gtacaggctc tgtactacta gaggttgtgt tcggttcac 240  
cgacaacctc catcgcgaaa agctcatttt ccatatcgcc ccattcaaaa gtggccatca 300  
agcactactg ggacgcgaag ctttcgccc ctttaacgca atagcgcatt acgtgtctct 360  
tacgcttaaa atgcccggtc cagcggcat aat 393

<210> 8231

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G8

<400> 8231

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ggtggacttc gggacgcgg cggtggacat ggggctcaag tacatggcct actcgtgcgg 120  
catggaggag agcacgctgg tggacacgct cgggcgcgac caccggcg tcaaggaccc 180

ggagtcgac caccgcagcg ggtggagcaa ggtggcggag tactacctcg gcaagcagga 240  
 cgtgaagctc gacctccagc ggttcgagcc ggtgctcctc aaggccatgg ccatgctcag 300  
 agagtagccg ctccgatcga gcttcgagcc ccggcgcatt ggttgattcg cactagcgta 360  
 gagcagttcc atttcttcta atttattcct attaatTTTA catatttttg ggtgga 416

<210> 8232  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-G9

<400> 8232

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 tatatagggc atccccaaat tagtaccacc tcgtttatat tatatcttaa atataaaatc 120  
 acctaagtgg gacgaaacca agaatacac cttgctttat tagtaggtat agatatagat 180  
 atagatatgt aattttatat catttcttga actaatctat taactcagtg ccagtgcca 240  
 ttttctgttt ttgcctatTT atttgtttca cagaaaaacc ataccaaagc aagttcaaac 300  
 acgatgaaat tttatgataa tttttcctgg accagaagag accctagaag ctttgaggga 360  
 ggctagaaaa tatacagaga gccacaaggt catacggagc accccaaggg gtgcaccacc 420  
 tgagcttggtg ggcccctc 438

<210> 8233  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-042-Q1-E1-H1

<400> 8233

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 agttgcggag agatggcgca ctggccatct cacaaccata ttgatggcgc actggaaatc 120  
 ttctcaggca aatactgtaa tagccaccaa tggtttgatg acattgctta ttgcaagact 180  
 tgaccatcga aaagttattg cttgtttgac tctgctgaaa ctaataaagg tttggTTTT 240  
 attcttttct ctcatggttg agtgattcta cttgtcaagt aaccaacaac gtttttagag 300



taagcttaga attttgggtc actcatgata aattaagccg ggaattaggt taataaaaaac 360  
 taaggcggga attttggata ctctgtatca ttgaagtgtt ccatgttgtc gtgtacaatg 420  
 tgagac 426

<210> 8234  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-042-Q1-E1-H10  
 <400> 8234

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 tcgggaattt tagaccaagc ttctgataaa ctaagatttt cggctaaacc attgctaact 120  
 ctctgatata tttcttgctg aaagtatccc tgatcccact gataacgagt aggcccaaact 180  
 aattcgattg gggtcgttgc tgaccatac cacatagttc cagcaactac gaaagctgca 240  
 aaaaaaacag cagcgatact actggaaagt acagtttcaa tattgcccat acgtaatcct 300  
 ttatatagac gttgaggcgg acggacacta agatggaata agcccgctaa tatacccaat 360  
 gtacccgcag caatatgatg agaagctatt cccccggaa caaaaggatc ananacttct 420  
 gcacccacg ctgga 435

<210> 8235  
 <211> 371  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-042-Q1-E1-H12  
 <400> 8235

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 tgccatcatc gactccttcc acaatgtcaa ctagattatg atttgcgctg cggccacgct 120  
 actgcgatta gttccttcca tagtttgetg ggatttttgg gtccttccag ctcgagtttt 180  
 tagtcgcgat gctgatgacg tgccgggtga ttcagaggta cagtaataaa taatttggca 240  
 aaactcaggg atgctaggcg ctatgcaett gtaccgtttt gcaagcttgt aatgctgatt 300

aattatgtat gatggcatct ccaattaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaag 360  
aagaacaaaa a 371

<210> 8236  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-042-Q1-E1-H4  
  
<400> 8236

cgggggccaac ggggcaatgc aaaaccataa tggcacctcc caaggggcaa taacaaaaag 60  
gttcaacctg gcataaccta agcaacatgc agcctgcccc acaaattggct acggacaatt 120  
tgggtggcca caaccttcat acggctgcca tgctctccgc agctggacgg ggtggacctg 180  
aactcgtccc taattcattg ctgccttttg aggtttccgt cgtgcttcgg ggcccataat 240  
ggatacccac tatatatcgc aagaagtttt cagttgacat gcgttgcttc gccggggata 300  
aggtttggct aaagcccga acccctccta atgggtgggc ttcagttggc gggtcattac 360  
catgtccaca atttagacct ttcataatgg 390

<210> 8237  
<211> 410  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-042-Q1-E1-H6  
  
<400> 8237

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ctttgctttg ataaacttct agatttttgc agtaagtata tgagttcttt atgactaatg 120  
ttgagtccat ggattatagc cactctcacc ctccacctt tgctagcctc tctaataaccg 180  
cgcacctttc gctggtatca tacacctacc atataccttc ctcaaacagc caccatacct 240  
acctattatg gcatttccat agccattcca agatatattg ccattgcaact ttccaccatc 300  
tagttcatca tgacacactc catcattgtc atattgcata tcccgggtaca ccgcccgatg 360  
cattcacata gagtcatatt ttgttctaag tatcgagttg taaatgttga 410

<210> 8238

<211> 412  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-A10  
  
 <400> 8238

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atgacaaaaa aaaagttccg gaagaaatat ggttactgcg aaaaggcaga cgtgaagtgg   60
aagccatatg ctctgattt caagcacaag aatctggcta agctcaccat ctacggcttc  120
caacccaacg acaattttta gcgatacatc aggtgtgttg tggaacatgc ggttaatata  180
acagagatat ctctgtacga caggaagctg tgtgggcgct gtggtgacaa ggtttatcaa  240
tcaagatata cacggactgc cgaggagagg aaacgaacgg ctgaagggtt gggtttgact  300
tcacctgctg tgattcactt ccggctctaa ctgaaaaatg atttgcatga tattcttata  360
tgtagtttgg aaatcaactc ctatcatctt tagtcggaag gagttcctga ac          412
  
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<210> 8239  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-A11  
  
 <400> 8239

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cgcaaggacc ttatggtttg gtctaacccc aaatggcata aacccttttg gggagcaaaa   60
cagcaaccat agcacctggc cggtgactct aggttttgta taaccttcct ccttggttgt  120
gcatgaancg gaagttcatt atgatgccag tgctcatcca aggcctaag caaccggca  180
acgacattga tgttttacct aaggccatta gttgaagaac tcttacaact gtggaatgga  240
ataagtgtac gtgcgtggga tgagcacatg ggggaagaat ttgacctaaa ggcgtttttg  300
ttcatgacca tcaatgattg gcctgctctc agtaaccttt cangatagac aaataaggga  360
atacgcggat gcacgcactg tttggatgat accgacagta tata          404
  
```

<210> 8240  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-A12

<400> 8240

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atgtgatccg tgtgtgaaaa gagaatgact atgggttttt gtgtgcacgc gcgggtggca 120  
cttgaatggg gtgcacgtgt acatgtgtgt atgctaacac cgatttgggtg tgtgctgatg 180  
atcatgtaaa ttattatggg ttgattgctc gtggatgtaa ggtctatgta cagttgttac 240  
atgagtgtcg tacagcctcc gcatgcatgc gtgctgcttg gcattgcacg tttataatct 300  
cgggttggtta cttgtaagcc agcatcagtt gtaaagtacg tgtgtcaaaa taagaaaact 360  
ctttcctttt tttttggttc aagaaaactc ttt 393

<210> 8241

<211> 142

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-A2

<400> 8241

caaggcctag ttaaaactca aggcaaaggc gttcacctcc aaaattgtaa cctaaatcca 60  
atgcatggac ttccggttga cagcctggga acgggtaaac ccttgtcggt tggaaattta 120  
accgcgtagc gtcaaattta cc 142

<210> 8242

<211> 318

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-A3

<400> 8242

gactggggaa cggatcggca gctcctaccg ccagggtcct ggagaagtac aaggatgagg 60  
cgctcgagcc agacattaag aactataca tgaggctgga agtgctggag gctgaccggg 120  
aatcgatgcy ccaggctctg ctgggaatgc gcactgagaa agctcagctt atgcttcttc 180  
gggagatagc acaacagcta gccaaagacg ccgctccagt tggcactggg gctgggtctg 240  
ttccagttgt ccaccatttg cccagaaagc aagctgtggg ggctgcagat acaacggtca 300  
gggaagacaa gaagacag 318

<210> 8243  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-A5  
  
 <400> 8243

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tgtcaccgct gatgattgtt ttgggtggca tgattatatt aagttaacta gtgagtagta 120
gcttccaact tgtatggatt gttgaatggt tcatggctgg atgggcatag catgcagcta 180
agcctctgaa tcgatcctgc tgtgatcctg aacaagggtt gactacatat aaatagcagc 240
acatatagtt tatcgacaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg aaggaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaaaaggggg ccccccaaaa g 401
  
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<210> 8244  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-A7  
  
 <400> 8244

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tatcatggct tcaaaacgta tcctgaagga actcaaggac ttgcagaaag atcctccgac 120
atcatgcagt gcaggtcctt ctggcgagga tatgttccat tggcaggcaa ccattatggg 180
tcctcctgat agtcctctat ctggagggtgt tttcttagtg aatatccatt tccccccgga 240
ctacccttcc aagcctccga aggtatcgtt caagacaaag gtcttccatc cgaacatcaa 300
tagcaatgga agcatatgcc tcgacattct gaaggagcaa tggagtctctg ctttgacaat 360
ctctaagggt ctgctttcaa tctgtcact gcttaccgac cctaaccggg acgaacctct 420
cgtcctctg 428
  
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<210> 8245  
 <211> 383

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-B1  
 <400> 8245

aatgcgaaat gagctcgtcg tcgccttcct gccatagcta catccacaga tctgcaggtt 60  
 ccacgcatct tcgttattcg ctacgatcgg ctacaccgcc gtagtgtttc atatgcatca 120  
 tgtcgcaggc agtcaaatgg attattgaaa tgattcgggt gactaaagct tcctagattg 180  
 tgaatgactt tctacattgg ggcaaacaga gggtcgcgt tgattttttt gcacttggtg 240  
 aacaacttag ggggcaacac cattccagca agcccgaggc gccactggca tggatatggg 300  
 tggtcgttat aacatatgga gaatatgcac atggaagtac tactattggg ccaatttatg 360  
 ccaggtgtac atcaagatgt ttc 383

<210> 8246  
 <211> 275  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-B11  
 <400> 8246

tgcggccaaag gcagccatgg agttcctcga ctccctctgc atcgctggcg cgtccagaaa 60  
 tgggatccag ctgctcaaac cgaaatccaa gaagaaacat gtgcaggcca agtccttgta 120  
 gaggccgccg tcgtccaatg gccggggcgat cgagggggca gaggatgctg ttggtggtga 180  
 tgtcactccc aagccgcac gtcgggcgcac ggagagcgac taggggggtcg ctgcgaagct 240  
 gcaccgcgtg atgaataact cgccccggat ttcct 275

<210> 8247  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-B2  
 <400> 8247

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ggagtctgca cgcagcaaca aggcgtccag aagccccgat cagccgcctg agctgcgcga 120  
 tgtgaacaag gtgaaggcgc tcgtcggcgc cttcgagacc gtcattggacg acaaccaaaag 180  
 ccccgccacc gcccgcaagc cgcgggtcaa cctccacgcc tgaactacga gtacattcca 240  
 ccagcatgaa gctcgatcgc gtgcgcctcc tcctttatcc cggctactct ttaatcacc 300  
 atcaacccaa tttgtcgtcg tcgcacactt atctataatt acggtatcgc ttacattttg 360  
 caaagaagaa gatgatgg 378

<210> 8248  
 <211> 421  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-B3

<400> 8248  
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 tccataaata aaaatttaag ggcgccaccac ttgaggttca aaggttcaaa aggtagggaa 120  
 caataagaac gggccaagaa gcaccatttt tccttccaaa tcacaggtgt ccttaatttg 180  
 gccaaagttta ttgcacacat cttagtatt agcatgagga atacaaccat agtgattagc 240  
 atggatagaa atttgatatg ggtcagaggg atttcgaatg gcacatttgt gaggacgaca 300  
 atcctgcact aataaccagt cctgacagtg tactgtttcc aagtgttgg agcaagtgc 360  
 agtcagctgc ataaatcaaa actcatagag tcaacttctt gtatgcagca ccgacacatg 420  
 a 421

<210> 8249  
 <211> 384  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-B4

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 atccatatgt agtatggcca atgaggaaca gccaatggtg taaggtatat gcatatgaat 120  
 aatcgctttc atctttatgt atataaaggc ggtgtttaca gcaccggcat agggaaagct 180

tggcctttac tagactcata cacctaattct gtcttctgca tgcctactga aacatttgaa 240  
 tgctttcatg ccaaattgct taatcttacc aagatttgaa tgatgtcctt ttcatacaata 300  
 atactcaatc ttgaccttac agaggacaca agctcgttta agctctctga gcctgtacca 360  
 acaacataca agtttaaatt ttg 384

<210> 8250  
 <211> 363  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-B8

<400> 8250

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 ccacaaagta ctcttatcat aaaacactac cgacttcacg aggggggaaac atcaacgagg 180  
 gtaacgaact cttgtgcatt accatggatt aacacttaac tccttttgtc gaacaaatca 240  
 gtcagtggca agtctccaaa ccacagaata ctttcgcacg tatgcatgac tgatttgga 300  
 tgattccaca caaagcaaca ttgactttct cgaatccacg gcgggatctt gcatcagttg 360  
 cac 363

<210> 8251  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-B9

<400> 8251

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 tacatcattg ctgctgtcag cagtgtcttc taaatagaca ctgcaattat catgtacatc 180  
 attgctgtcg caatgaacca ttaagaatta tttaaaatct agcctaccat ctgcgttgtc 240  
 gtcaacagag gggtgaggcg gagttacaaa atctgtatga gaaaccgagg gattgtccga 300  
 gtcagcgaca tctttgttat cttcagagct gtcagaagca gctgagatgg cgtcacctga 360



ttctgaatgt gttctgtcca catatgcttc aggtaaggag ctctcggcca cgtcagcatc 420  
gccgttatgc cgagcaatc 439

<210> 8252  
<211> 390  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-C1  
  
<400> 8252

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ctatttagag agatgacagg aactggcatc tcacatggat agtcataaaa tcctagataa 120  
aacttgtaga tcaactgaata tgatatgttt cattccttgc aatagatttg cgatataaag 180  
atggcgatat tacagtcatg ctagcgggta gttgtggatt actagaaata cttgtgttga 240  
tgtttgtgat tcccataaca tgcacgtatg gtgaatcggt atgtaacgaa gtcggagcat 300  
gagttaatta ttgattgtct tccttatgag tggcgggtctg ggacgagcga tggctcttttc 360  
ctaccaatct atccccctag gggcatgcgt 390

<210> 8253  
<211> 436  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-C10  
  
<400> 8253

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gtcgcccta ctgctcaggt ggactcaaat ggctgcttag gttgcgggca aaactgttgg 120  
gtgcgcagtc gcgggggagc cgcaggcaat caatggcgac aaggctctgct caatcaacgg 180  
acagggtgaa cccgaggctc cggcttaggc aaaaagttca gaagttacta aactacaaga 240  
ctattcagcg ctggcacaag aggtgggtgag gaatagcgac tacgacgagc aaagacgcgg 300  
tgcagccggc aacaacgact gtcgcctgct ctctggtaag gcctccatct tttatctctt 360  
tttgtgtcac tttgaactat acacaagtgc aaactagttc ggctcaagaa aagtataaac 420  
aagacacaac cctctt 436

<210> 8254  
 <211> 337  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C11

<400> 8254

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 tttgctatca ttaaggaact gattgctaca aatgaatttg tcaatattgt gcctaaaagt 120  
 tttataatcc ctagaaagaa agaaattcct aagggaaata gatgcatcat cgaagaattg 180  
 cctaccaaag atggtaatac ctagatctat cctcgttttt atgcctagct ggggggtgtta 240  
 aacgatagcg cttgttggga ggcaacccaa tttaatTTTA atcccttgct tttttccccg 300  
 gctaagtatt aaataaatta tttacccccg gttttgg 337

<210> 8255  
 <211> 356  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C2

<400> 8255

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 ccacgatacc caccaaggtc aagtacacgc cgcccaagca gccgcactac aaccaggaca 120  
 agacccccga gttegtcatc aagatcctcc agttcttggg cccctctcgc atactggggc 180  
 tggccgtcgc cgtacggatc tacaccaagg cagactctgt ctagcaccgt catcttatac 240  
 cagtcagtca gtcattcgga agtgtccaag agctgaataa gttttagtgg ggatttgcac 300  
 attttgtagc agcgtcaccg tctgtcatg gaatctggga actgctctcg acccgt 356

<210> 8256  
 <211> 317  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-043-Q1-E1-C3

<400> 8256

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ctggacacct gtgtgttctg ggtccttcgt ctgggtgcta ctacatgtgt tgtactcctg 120  
tttgctatat gaatggcatg tgggtgcttca aaaaaaaaaa aaaaaaaaaa aaataaaaaa 180  
aaaaatataa aaaaaaaaaa aaaaaaaaaa aaaaaaatca aaataaaaga ttaaaaaatt 240  
taattcacia aaataaaaaa taaaaaaata ttttaaaaaa taaaaaaaaa taaaaaaaaa 300  
agggcctccc caaaaat 317

<210> 8257

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C4

<400> 8257

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caccaccaag ccgtccaaga agccccgatt aaacctccgg aacctccgga aggtaaacaa 120  
ggtaaaggcc cccgtcggcc ccttcaaaac cgtcaggaa aacaaccaa gccccgcaac 180  
cgcccgcatg ccgcggtca acctccacgc ctgaactacg agtacattcc accagcatga 240  
agctcgatcg cgtgcgcctc ctccctttatc ccggctactc tttaatcacc catcaaccca 300  
atgtgtcgtc gtcgcacact tatctataat tacggtatcg cttatatattt gcaaggagga 360  
agatgatcga agggttatca tgatgtaata ataataatga tcatggaggg aaaaaaccca 420  
cccgttgga aaaaaaaaaag cggccgcccc aa 452

<210> 8258

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C5

<400> 8258

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ggcactagcc ctggcactgc tcggtgcttt cggcctcgcc atgccccgg ctgttcagtc 120

ggccccacc atcgaggcca tccaagctac atgcgccaag acaatacagc cagactcttg 180  
 caaacacgtc ctgctcgcca tcatggccgc cggctcaccg gaggtgaaca gtgtccccct 240  
 aatgtccctg caagtcgctg caaagctcgc caagatggcc aacggcttcg ccaatgccag 300  
 gctcaccacg gacccgcacc ccgccaatg cctcgcaaac tgcacgaag accttcatag 360  
 ggtggccaag gcatttgagg ggatcccagt gg 392

<210> 8259  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C6

<400> 8259

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 tggatatgtg tctatatctg atctgcaatc tcagctcgac agtcttctgt aggccatact 180  
 tttgatctgt tttgttatgg tgtgtectct gagtctgagt gagaaatgca ctcgattggt 240  
 catctatagt gatgttactt ttaatcctgt catcaaattt aaacacactt tgatatgaca 300  
 tcaattatgg tggatggcta atacactatt gttgctaata tgtttagcata tcagattgat 360  
 taaatcgccc ttccaacaa t 381

<210> 8260  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C7

<400> 8260

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 taaatgtatt tcgctgccc tgctactact gtagtcatgg ttgtataata atggtgtcag 180  
 tatctaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaa aaaaaaaaaa ggggcccccc aaaagggttca aatttaattt ccccttaaag 360  
 ggaatttaaa accccttcaa aaggggcccc aaatttaatt tcacgggcg tcttttttaa 419

<210> 8261  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-C8

<400> 8261

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 gagttacagt ttaaaagata cagataattt agaaaagcat ttgttttatt taaatatctt 180  
 ccaaaataat atttaaaaat atttaacagg taaaaataac aaaaaatata tggagagttg 240  
 ttaaaaagggt tgtaaaaag atacatgatt ttctaactcat aaaaatattt ttttgtctgg 300  
 aaaagatcat ttttgtatgg tcttctgtgg acgcaggtag ttgcgccctt atttcatcac 360  
 tatttcttgc tatacatgtc 380

<210> 8262  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-D1

<400> 8262

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 catcgggtgat ggcgatcggc gagaagacga gtcagagaca gaggacatca gaacatgctg 180  
 attaaggaag atatcgggtg tgacatttta tgccacgtca gctccaacga ctgggccatc 240  
 cttgtcataa tcacgatcga ttttaaagca ctcggtcatt tgggggtttt gaacagccgt 300  
 ctctaaagtt ggtagttatc agcaccagaa taaacttagt agttttttga aaccctaccc 360  
 cgaactgtag taattttatg tcatttactc gagttcaccg gaataatagc ttgggtttcc 420

<210> 8263

<211> 409  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-D10  
  
 <400> 8263

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 cggacgacaa ctgaagcaaa acaatcgacc atcgacagta aacctctgaa gaaatgttga 120  
 aatgctgctg ctgcttggtt gattacagag agctcagtag gcaattaagg cctcacatct 180  
 gacattagca tccgtaacat ttgctagcac tactcctagc agtacacaag atcacaagaa 240  
 tctccatttg ctagcactac tcttagcagt acacaagatc acaagaatct ccatttgcta 300  
 gcactactcc tagcactact cctagcatct gacattaagt tttgacggag aagagacagg 360  
 aagaggaaga gagagcaata cctcaaggag tcatcaccca tggacgcat 409

<210> 8264  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-D11  
  
 <400> 8264

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 ggaagccaaa gtcgcctgtg gcgaatgggtg ttaacgggga tgcgaagggtt ccggcagaga 120  
 aagccgctgc caccgctgct cctccggccg ttacctacgc ggcgaagggtg gcccaaacag 180  
 cagcggccga gaagaagcct gtggcgaccg agaagaagcc tgttgctgcc aacgggtgctg 240  
 tcaagaccgg agtagctgct tgatgcgatt acccgatcct ccagctagc catgaagaac 300  
 aaacggacgg tgctggcgaa ccaggcgaga catgcgggtt ccaaggtact gatcatcaaa 360  
 ggtggcgtct ggaaagcggg tccgataat 389

<210> 8265  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-D12

<400> 8265

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ccatgatttg cctttaggat gagtagattg cttgttggtt tgtgcggtgc aaacataaa 180  
ctttggctgt agtgctcgat ttacattttt ttactcaaat gtcaaagat tctgaaactt 240  
tttgtaatgt ctttatatat aatTTTTTTT cttttttcct aatTTTTTca gaatttttag 300  
agttacagaa gtatggtgga tgttcaaact ttacagact gtgtcctgtt ttcacatatt 360  
gttggttatag cttcattatt tgcgtatggt tg 392

<210> 8266

<211> 333

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-043-Q1-E1-D2

<400> 8266

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gcttgcaagt ttgggttcta cgagttcttt aagaagacct actcagatat ggctgggcct 120  
gagaatgctg cgaagtacaa gaccctgatt taccttgcan ggtagcttc tgctgaggta 180  
attgctgata tgcctctgtg cccctttgaa gctgtcaagg tccgtgtgca gacacagcct 240  
ggatttgctc gtgggttgag tgatgggctt cccaagttca tcaaagctga ggggtgctgct 300  
gggctctaca agggcattgt tccgctctgg ggt 333

<210> 8267

<211> 395

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-043-Q1-E1-D3

<400> 8267

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gtaggaggat tttgttgac cagccattat taaattgaat gcgtggaac cactattttc 120

ctttaagtt caagtaaac taaaactga tcaataacat gccacagcat ccaggaagca 180  
 caatactata tcattcacgt gcgggtcccg accctccatc aagttgaaaa ctagactagt 240  
 gaaaatgtca attaggatgc ctctttgcat acaaatgtgc tcctagcttc aaaaaaatg 300  
 cactcctaca tgtaccgcg aatgggtgtg agagaactag tgcgtgcatg caccgcttcc 360  
 ctctgtgaga gtacaatata ctatgccaa agaac 395

<210> 8268  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-D4

<400> 8268

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 gcctctgttt tggttgtgtt tgttgtgttt aattagtgtt tgtgccaaagt agaaccgttg 180  
 ggaaaacttg gggaaagtct tgtaatctt gctgtaaaa acagaaactt tagcgctcac 240  
 gagaactgct gtaattttta ttttgaaagt gctatttagt taattctttt ttgaagatga 300  
 ttaatagata aattcctcac gtccagcaat ttattttaga atttttgggg ttccagaagt 360  
 ttgcgttagc tatagattac tacagactgt tctgtttttg acagattccg ttttctgtgt 420  
 ggtgtttg 428

<210> 8269  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-D5

<400> 8269

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 ggaggcgggc tgcccgccg cgacatcact ctagccaccg gttggtcagc catggtggcg 120  
 agcatgcgtg tcgagcacga ggctctccat ggctgagggc gaacggcgag aggaagaaag 180  
 agagacagag gagaagaaaa catgctgagt aaggaagata tcggtgttga cattttatgc 240



cacgtcagct ccaacgactg ggccatcctt gtcataatca cgatcgattt taaagcactc 300  
 ggtcatttgg gggttttgaa cagccgaccc taaagttggg agttatcagc aaaaaataa 360  
 aattagtagt tttttgaaac cctagcccca actgtagtag ttttatgtt 409

<210> 8270  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-D6  
 <400> 8270

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 tacttcgtca acatgtgccca tttgcttgga agactacagt gttggtgaaa agataagggg 180  
 gctgccttgt cgtcacaagt tccatgctgc ttgcgtggac ctgtgggtca catcatggag 240  
 gacattctgc cctgtatgca agcgagatgc aaatgctgga atgtcaaatt tccctccatc 300  
 agagtctacc cttttgcttt cttctgctat tcccttgcca gctgaatcga cagctttgtc 360  
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<210> 8271  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-D8  
 <400> 8271

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 gccatcatga tcctgacggt gaagcgcgac aacatctgca gcttcatctc ggagaccaac 120  
 cccgggcacg tgcggtcgtg ggagaccaag gacagccagc tgacgatggt ggcggaacgac 180  
 ctgaagccgc gggcggtgct gacgtgcccg gagaagaagt tgatccagca ggtggtgttc 240  
 gccagctacg ggaacccgct ggggatctgc ggcaactaca cgggtgggcaa atgccacacg 300  
 cccaaggcca aggagattgt ggagaaggcg tgcgtgggga agaggagctg cgtgctggcc 360  
 gtgtcgacg aggtgtacgg cggggaactc 390

<210> 8272  
 <211> 432  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
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<400> 8272

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 aagtcaaagc gggatgcccc ggaaggcatc ccctctttcg tccacttcca tcggtaat 240  
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 aattgcgtan tttctgtta gtctaccaca atcatccttg ctgttcacac cttttgggaa 360  
 aaccatacat gaattgaaat ttgtaaaata ctctatgtgc ttcacttata tcttttgagc 420  
 ttgatagttt tg 432

<210> 8273  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E1

<400> 8273

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 gctagctaca gattactaca gactgttccg tttttgacag attctgtttt tcgtgtgttg 360  
 tttgcttaat ttgatgaatc tatgggttagt aaaatagttt ataatccata gagaagctcg 420  
 aatac 425

<210> 8274  
<211> 399  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E10

<400> 8274

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tctgggtgatg tttccttcca ggggtggagca tttatgagtc tatggcttga tctgaggtgc 180  
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gatcaacagg gatacaattg gagccaacga ggttgtctgg ggtgttaaga ttaggaaaga 300  
ctaaaatccg ggggagtttg aggaaaaatg gaccaaggat taatatagtt gctttaaaac 360  
ttcatatttg gtccaagacc aagattatga tgatgcact 399

<210> 8275  
<211> 150  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E12

<400> 8275

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gggtcaaagat aaagtaaaat aacgtacttt 150

<210> 8276  
<211> 376  
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<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E2

<400> 8276

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cctcatgatt gcgcagctcc tgccgaacgt gaaggagcca gaggcggcgc agccacttgc 180

cgggctggac agtactcttc ggagagccca cgagcttgtc gtgtcctgcc aggagaggag 240  
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<210> 8277  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E3

<400> 8277

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 gtctcagata tcgagttgta acattgagtt gtaagtatat aacagtgtga tgatcatcat 240  
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 cccc 304

<210> 8278  
 <211> 336  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E4

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<210> 8279  
<211> 390  
<212> DNA  
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<223> Clone ID: LIB104-043-Q1-E1-E6

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ctgtgattct tttctttcta tacctttttg 390

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<211> 404  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E7

<400> 8280

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acatggtaaa tctcatccag ctcatcatcg tccagcaagc ctac 404

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<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E8

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atataattca cacaataaat cacatcataa caatggaatt catcggcagg ccgtatatcc 180  
atgggatgat tttcgtacat agatctaaac aagaatggca tgtctacctt agggaaactt 240  
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<210> 8282

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-E9

<400> 8282

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<210> 8283

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-F1

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taatactacc agagtggaca atggcaaagc gtaccatgca tacacaacgg aaaagaagcc 180

cgagcctgcg cattgaccaa ggttgtttac ttgtagcaca aatcatgcaa accagctcgg 240  
tgaatTTTTg agctgatgcg tgctgttatg tctgttttgc tgatgcacct agttcctttg 300  
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gttt 364

<210> 8284  
<211> 314  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-F10

<400> 8284

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gggccgcatg atattgaggg cggctatgat gatgaagacg aggcggctct cggctttggg 180  
atcacgctct tctggctcat catcatgacc atcataatcg ccgtgctctc cgagtacgtt 240  
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atcctgttcc ccat 314

<210> 8285  
<211> 406  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-F11

<400> 8285

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caccaatggc aggattgttg atgaaataaa cgatgagcat tacctgtcga gcagcgtcgc 300  
gggaacaacc gccgccgcca tggttacgat cactgatctc ggcatcttga tatgagttta 360  
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<210> 8286  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F12  
  
 <400> 8286

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agtggcggac ggagacgggc gatggtcttt tcctaccaat ctatccccct aggagcatgc   60
gcgtagtact ttgtttcgat aactaatagt tttttgcaat aagtatgtga gttcttttatg  120
getaatgttg attccatgga ttatacgcac tctcaccttc caccattgct agcctctcta  180
acaccgcgca cttttcgccg gtatcaatca cccaccatat accttctctca aaacagccac  240
catacctacc tattatggca ttccatagc cattccgaga tatattgcca tgcaacttac  300
caccattccg tttattatga cacgctccat cattgtcata ttgctttgca tgatcatgta  360
gttgacttca tatttgtggc aaaccacct tcataattct ttcatacatg tcaactctga  420
ttcattgcac atc                                                         433
  
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<210> 8287  
 <211> 394  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F2  
  
 <400> 8287

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ttacggacta tattgatggg ttgcattcta ctattgcaca tgatgatttt gatagatata  180
atatgcatgt gcatgctgct cctacttgca attattatga cagagtaact acatctccgc  240
ctctctatgt ttccaatagc ataaaattgc acgaaactgt ttatactatg cattggcctt  300
tactttgtgt gcatgaattg ttcatttatg acatgccgat gcatatgaag agagttatac  360
cttcgtaatg acatgagata caatactttg tgct                                                         394
  
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<210> 8288  
 <211> 347



<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F3  
  
 <400> 8288  
  
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 tcccctccgg gttttacgcc aacaacgtgg atacatcgac gccaccaacc ggcgcggcga 120  
 cctcacctac gagctcggcg agaatgagtt cgccgacctc acccaggagg agttcctagc 180  
 caggtacgcg tcgtcctacg atggggtcgg tgatgatact ggcacacgt tgctgtggg 240  
 cggtggcgac gccgagctgt ggtcgtccgg cggcgacaat gatagtcctc tggaggctcc 300  
 gcctcccagc tgggactgga gatccaaggg cgccgtcaca ccggtca 347

<210> 8289  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F4  
  
 <400> 8289  
  
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 gtacattttt ttatcagatc gtattactag tgtgtgttac ccatctccat gttagcatcc 120  
 caagcccac tgggtgggtcc ttccatccag cccggcccac tctgacgacg caggtctcta 180  
 acacagacga cttcttgcca ttcaccaaca catacatgtc actataatgg atgaatgtgc 240  
 aaatctagca agagggcata tatcacttta gttcgatgat ctgccatttc taaaacaact 300  
 agtttcaatg agtgaaatta gaccatgtgg gcaggttggg aagctaccga cacgtgaatg 360  
 caaacgatga gtgaaatcag a 381

<210> 8290  
 <211> 276  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-F5  
  
 <400> 8290  
  
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aggagcatca ccatattcgt tggcttcgac atcatacagt tttttgtaat aagtttgtgt 120  
 gtgggtggat ggctaagtgt gtctcgtatg gattatcggc attctcacct tcaatgtatt 180  
 gcaagactct cgacaatggc acacgtttct tcgttactgc tcacttgttt ccgacgtcct 240  
 tgaatatact gacaacagtt acctaatagt ggattt 276

<210> 8291  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-F6  
 <400> 8291

attcgcgggt cgacgggtga ttgactgta cattagggac tgactcctgt ctgcaaagt 60  
 tcagtgggtg tacatatggt aaatgtgaag ttatgaaaga caccactgtt ggcataaaat 120  
 cctatgcagg tattgctgcg gagggatcgc gaaacggagc gctcttgatg gcaatgaatt 180  
 accatgtcaa tacatccaat agcgctttgt gggattacat gccaatggtt ttccacatct 240  
 gaccttctcc gaaatttttg caccgtactt ccgccatgtt aggccgcgtt tcactttttg 300  
 cttgttatga tagtatttca accctttttg tgggaaaagc tgatattggt tagatgttgg 360  
 gtatagaaga gccatagagg gaacctaac aacacatttt cggcagcacg gtcc 414

<210> 8292  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-F7  
 <400> 8292

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 aaaggcgagg atgtgaactc cctgcagccc aaggaaactga tcgccattga ggaagctctc 120  
 acgaacggcc agaccaacct cagggacaag atgatggacc actggaagat gcacaggagg 180  
 aatgagaaga tgctggagga ggagcacaag ctgctggctc tgaggatgca ccagcaggac 240  
 gacctgagca gcggcatgag ggagatggag ctcgggtacc atcagggtag ggatttcact 300

tcccagatgc cgttcacctt ccggtcgag ccagccacc ccaacttgca ngaagacaag 360  
taggccaccg aatccctgca cggncgtgt caactg 396

<210> 8293  
<211> 376  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-G1  
  
<400> 8293

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agcaatttgg gtgaaggagt tcatcacga cctaggagtc ataccaatg tgcggggcc 120  
gatcaaacac ttctgtgaaa aactggagc tattgccct gccaggagc ccaggtttca 180  
caagaagacc aggcacatca agcgtcggtt caactccatc cgtgaaaaag ttcaagatgg 240  
agacatagat atttgcaaag tacatacgga tctgaatgtc gcagatccgt tgactaaacc 300  
tctctcgga gcaaacatg atcaacacca gaactctatg ggtgttcgat acatcacaat 360  
gtaactagat tattga 376

<210> 8294  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-G10  
  
<400> 8294

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acctggtcgg aacatattcc ccagcgactt acatttcgga acggaggag tagtgactat 120  
ctatttcata tctttattag tcatatgtat ccccgatcgt ttgctccatc agggataacc 180  
ataaaataaa gcagatgcat gttggttatt gaagagaccc agaggagcaa cttctgaatc 240  
ttaaatatgc caaaagcaca ttcaacattt aaataattgt gtttaccttt tgattaccac 300  
aggggtggta cagactggtc cttctgacct gtgatgataa ctcaagggtg ggcagcggcg 360  
gctgtggtag caaacggtgg tggcggcaga aggggaga 398

<210> 8295

<211> 401  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-G11  
  
 <400> 8295

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gggggatgcc acggaagcat cccatctttc ttcaacaaat atcggtatgt tttcgttttt   60
gtttcgttca cgtgatatgt gtaaactcttg gagcgtcgtg tgctttttat tttttaataa  120
tgcaccatgc tggatgaga tagtccatgg ttggatttat agaatgcttg tgcttcaactt  180
atatcatttg aagtttggtg tgccgtgttc tcttcacata cgaaaccgtt atttgtagaa  240
tgctcttttg cttcacttat atttattaga gcatgggtctt ttgtagaaag aattaaactc  300
tcatgcttca cttatatcta tttagagagt caacaagaat tggtcatttg catgggttagt  360
cataaaatgc tacataaaac ttgtggatta ctgaatatga t                        401
  
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<210> 8296  
 <211> 445  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-043-Q1-E1-G12  
  
 <400> 8296

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ggggccaggg gctctaacag catgtagggg tattaccgga tgatgtttcc cggggcccga   60
agctgtctaa atccttgtgt tgtgttgctg ctctcgatcc cgctcaacc ctctcaagct  120
actacataga tgcgctggcc tcgcgactaa gtccgtgacac taaggacatc tgccgtgaca  180
attccacgac acggcccatg tatggcccat gacgtctttc ggcccatatg aggcccttat  240
tactctcggc ccattaacga cccgtggtaa aactggcccg taatgaacag tgtaccactt  300
tataccattt aacggcccggt ggtgaaactg gctgtaatg aacagtgtat cactttatac  360
ccattaacgg cctattattc cgttggggcg tttccagccc atgttatctt tcggccttct  420
cggggcccat ttgttcttgg gctca                        445
  
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<210> 8297  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-043-Q1-E1-G2

<400> 8297

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tccttctttg tcagccgagt tgacagtctg atcgacaaaa tgcttgagaa gattggaaca 120  
ccggaggctc ttgccctgag gggaaaggct gccgtagcac aagcaaagat agcaaaccag 180  
ctttacctga agaaattctc tggcccagg tgggaggctt tggatgaagaa gggagccaag 240  
aagcagaggt tgttgtgggc atccaccagc gtgaagaacc cggcttactt ggacactctt 300  
tacgtcgatc ctctcatcgg acctgacacc gtctctacga tgcccgaaca agctctggac 360  
gcgttcatcg accacggcac agttgctang acaatcgacg ct 402

<210> 8298  
<211> 404  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-G4

<400> 8298

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attccgaatc aagaaatttg ttgtggaatt tgtcaattga gtaaagtaat aatattaaga 120  
actagatcat ctaaccccat tgaatgaaaa aatgaaattc gattttcaag gaaatttttg 180  
aataagagat aaataaacia ttgaattgaa aaaaaaaac ttctttctat ttgggataat 240  
ttctttttca ataggaccct ctttttggag tgaacgatcg aatattcccc tattccttct 300  
tattttaact gattgtattc catatggaat aagaggagaa caaaagcatt ccacgacctg 360  
ccaaggggct gttaaaaaaa aaagaaagct cttccttgaa tttta 404

<210> 8299  
<211> 383  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-G7

<400> 8299

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaattaaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaagggg gccccccaaa aggttcaaac ctaacttacc cttaaattgca 180  
 acttcaaacc ccttcaaaag tgccccccaaa ttccatttca ggggccttct tttaaaaact 240  
 tottaacggg aaaaccccg ggttaaccaa attaaacccc tttgaaaaaa atccccctttt 300  
 cccaagctgg cttaatacca aaaaggcccc aaccattccc ctttccaaaa atttgcccac 360  
 cctaattggc aatgggaacc ccc 383

<210> 8300  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-G8  
 <400> 8300

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 ttcgttgaag cagttttcaa gaccgatgac ccaagacgaa gaagagctcg gaagatccga 120  
 gggatgtctc caaacttgaa gactggttta ggagctactg atggtgtctc agaattgggg 180  
 tcattcacca tgctgtgtcc cggccagggt ggccggggccg aggaccccat gtcggttcac 240  
 tagtggacca catcaaggcg gaccatggct tgaagaagga atacttccga agacttggcg 300  
 cctactccaa atacttagat gtcgtctaca acacaattac cttatacata gccgaccttg 360  
 gtataaccct agccaaccct ggtatctata taaaccaggg ggacagggct cgtacatgaa 420  
 at 422

<210> 8301  
 <211> 435  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-043-Q1-E1-G9  
 <400> 8301

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 ctagcatgca cgtatgggta aagttgtgta acaaatttga aacatgaggt gttcttagat 120

tgtgcatcct tatgagtggg ggtcggggat gagcgatggg attttcttac caacctatcc 180  
ctctaggagc atgcgcgtag ttcttggttt ttgatgactt gtagattttt gcaataagta 240  
tatgagttct ttgactaat gttgagtcca tggattatac gcacttttac ctttccatca 300  
ttgctagcct cttcggtagc gtgcattgcc ctttctcacc ttgagagttg gtgcaaactt 360  
tcccggtgca tccaaacccc gtgatatgaa acgctctatc acacatanac ctccctatat 420  
cttctcaaaa acagc 435

<210> 8302  
<211> 253  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-H1

<400> 8302  
cttgcgccgt tttcccttgg ccccttggg ttggttcaact tcctcttttc ctttctttt 60  
tggtttatct ttctcttctt gttgtggggg ggtccccctg tgggttcttc cttttcttct 120  
ccgtcttttc gccttcttgt cctcttttgg ttgtctctct ccttcttttc ctggccctcc 180  
tttttcttcc ttttcggcgg ggtccctcct gtttttcccc tcttttctcc tttttctgct 240  
ttccctctt ttc 253

<210> 8303  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-H10

<400> 8303  
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actgttctgc gtgggttcgc acatatgggc agtttttggg ggaaagactg gaatgcttca 120  
ggatcctgaa atatgatgtt gaggtgagc gtttatccaa acaaggccaa ggtcctgaaa 180  
agggacacag tagaaccaga gacctagatt ccaggacct gttagagcag ttgccagctt 240  
tgcagcagtt actgtatcgg cttgttggat gtcggccaga aggagctgca aataacaact 300  
acttggtgca atatgctcta gctttggtgc taaaagagag tttcaaaatt tattgtgcga 360

taaatgatgg aattattaac cttgtcgata agttttttga gatggcaaga catgaagcac 420  
t 421

<210> 8304  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-H11  
  
<400> 8304

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cgagcgagga tagcgaaatt agggaaatcgc ctgaaagatg gcgaaagccg tatatgtgga 120  
ctgaatcttt gcaggatgct tggagacaag tttctcaaag agcaagatcc aaggttcagt 180  
aaagaaccat atgtgagccc agtagttcag atctcgaaat cgtgctcagc ttttgcgctt 240  
atcgctagcg atggcctatg ggatgtcatt accgcgaaaa aggcagcaca gcttgtcctc 300  
gattataagg agaggaacat gggccaagaa atctcagcgg acggagtagc agaccatgtg 360  
cttagtgaag ccaggaatct gcggacgaag gacaacacat 400

<210> 8305  
<211> 330  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-043-Q1-E1-H12  
  
<400> 8305

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cgagaagcct gtgctttcta gacctcagca tcagtttttc ctgggtgata actactttga 120  
ggttgacatt gacatgcata gatttggtc catctcaagg aaagggttcg agacattcct 180  
ggacaggcta aaaatatgca tgctagatgt tgggctaacc atccagggaa acaaaccga 240  
agaattgcct gagcaggtct tgcgctgtgt taggttgaac gggatagatt atgcaaagta 300  
tcagccactg atgacaaacg gtgcttgaac 330

<210> 8306  
<211> 261  
<212> DNA



<213>      Triticum aestivum

<223>      Clone ID: LIB104-043-Q1-E1-H2

<400>      8306

gcgcggcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    60

aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagagga aaaaaaaatt    120

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggggccccc caaagggttc aaccttaatt    180

tccccctaaa ggaaatttaa aaccctcca aaggggcccc caaatattaat tccaggggcg    240

tctttttaaa aacttctaaa g    261

<210>      8307

<211>      339

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-043-Q1-E1-H3

<400>      8307

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aaatttaatt taacttttgg gttaattttc caataattgt ggtttatatt caaaaaacca    120

aaaggtaaaa ttcatgtgag ctttagaaaa aattataaaa atataaaaag atgtcgccgt    180

atgttaaaat agatctatat agttccatta aaaatatgta cgtaatatat gaaagaaata    240

ttcatgtgtc ttcataaaaa tgtcattgag gatttttaaaa atgtttatgc aatgttaaaa    300

aatgttgtga gcagtaattt ttctgtttcc agtaaaatt    339

<210>      8308

<211>      394

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-043-Q1-E1-H4

<400>      8308

gctctggaag gccgggtacc tagccaagaa agtagccaat cggcttccgg ccaagggaca    60

aatcgtcccc accccgaagc cccaggagag ggtggtgttc gtctctcact tcgtccgcgg    120

gctgggattc ccctcgacc cgttcggtccg tggacttatg ttctactacg agcgggactt    180

acacgatctg gcccccaacc ccacccctcaa catctcggca tttattgtcg tgtgcgagggc 240  
 ctctctctgc ataccacctc actttggact atggctgaag accttcaatg tgaagccaaa 300  
 ggtggtgagc ggtcagcaac cagagtgcag aggcgccatg gtgggcaaga tgcccaatgt 360  
 cacctggccc gaaggatcct ttgtggagac tgtc 394

<210> 8309  
 <211> 430  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-H6  
 <400> 8309

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 atacaagaag cgcgacgacg acgacgatga tgagaggaag ccacggcaca agaagcacga 120  
 cgatgatgac gacgacgatg gcgagaggaa gccgcggtac aagaaacgtg acgacgacga 180  
 tgatgatgag gatgacagga agccgcgtta caagaagcgt gacgacgacg acgacgatga 240  
 tagaaagcca cgttacaaga agcagcagca cgatgacgac gacgacgatg agaggaagca 300  
 gcgtcgcggg aacaaccgcc gccgccatgg ttacgatgac tgatcaaggc atcctgacat 360  
 gagtttagct gacgctaaat aagtatagtc gcggcggctt tgcttcgatg aatcaacaat 420  
 tccgtatttt 430

<210> 8310  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-043-Q1-E1-H7  
 <400> 8310

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 ctcaagcaac agcatttcat tggacactta cagttctttt catagctatg gcaccaaaga 120  
 gactgacagc tgggtgaggc cacacctgga gcatgatggc tcagggtttgc tgctgcaagc 180  
 atacgatgat gacattgaga aaatctgcta tgtgatgaat gagctagcag gtggtggtgt 240  
 cgatggttct gctgatcgta tcatggatga gacgctttac tcgaatggca tcgatgattt 300

catgattttg ccagcaggca agaatgggga gaagaagaag cagctaacca tcgatcaaga 360  
attcgagcag tactttctcaa aactcatgct ttagcgtgac cgtaacagag aattta 416

<210> 8311  
<211> 432  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-043-Q1-E1-H9

<400> 8311

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acctaaatgc cgggtgatagg ttgttcgccg ctgtcgtgcc gtctttgaac ttggtggaga 180  
cgcagaagca gtggcggagc taggatcaag ccatgaccgc ggcaagcccc aggccaatca 240  
cttgggtacag tgctaaacag tgtaaaatcc actacagtaa acgaaggagc caagcctcag 300  
gaccaggcc gccgcccggg cagcctgggg cttgtctccg ccactatgca gaaggagaac 360  
ggtggcgccg tgaagacctt gacgactgtt gccatgacca caacatgat gattgtgttg 420  
gtaataaaga ta 432

<210> 8312  
<211> 390  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A1

<400> 8312

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gaaggcattc ttgactcca caggctccct ctgggagaag cagaggctcg ccgggaagcc 120  
cgctggattc ttcgtcagca ccggcaccca gggcggcggc caggaaacca ctgcttggac 180  
ggcaatcacc cagctggtgc accacgggat gctgtttatt cccatcggct acacctttgg 240  
ctcgggcatg tttaacatgg acgacatcag agggggcagc ccctatggag ctggagtttt 300  
tgctggtgac ggtagcaggc agcccagcga ggcggaactt gccctcgccg agcaccaggg 360  
caagtacatg gccgccttcg tcaagaagct 390

<210> 8313  
 <211> 446  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A11

<400> 8313

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gtatgagtat atatccttca atatatagta ggcacatcta ctctatctag tatacaaaca 120
ttcactttac aacgtatcta ttgttgaaaa gcagctggaa atatatagat gcgtggagca 180
agttgtgcat aatatcacca tcactaattg ttgaaaagca actggaaaat tgtaatttaa 240
gaaacctcag agcattgatt caaatatcac ccatcatagc tcacaccatc actaacatth 300
agagcaacat gtacgagtat ctatcctctc aatatatagt aggcacatct actctatcat 360
acattcactg tacgacgtgt ctgttgctga aaagcaaccg gaatagatat agatgcatga 420
aacaagctgt ggacattgtg tggcga 446
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<210> 8314  
 <211> 439  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A4

<400> 8314

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tggtgcagtt gaagtagaag atgcatgcgg tgtccatgat gaaggctcgg gatgaggaca 120
tgactacctt ggatatgacc aaaaatattg catatatgca tatttgtcag gtgatttcta 180
gtgcaaacta ttcaataatc tatttatgtt atccagaaca aaataacttca cacacttttg 240
tgttttgtct aattgcaggt gtatgggaca tttgtagaat ccacatatga agataaggaa 300
gaaagagatg tttatttgcg gtccaaaaag ttctctcacg tcacttttgg cccaagagaa 360
gatagagtcc aagtctctca cgttctggat tcagattcgg actgcacaga cacacctgac 420
tcaaaacgca cacaagttt 439
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<210> 8315

<211> 372  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-044-Q1-E1-A5  
  
 <400> 8315

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 gattgaacag aaataagatg acagctgggt acacataagt ctttccaatt ggcagtaagg 120  
 agctgagata aagatcacca caacgtgatc caaagaccgc aggtggcacc gcacgcgcag 180  
 cgggcgacgg caaccgccag ctccacgtcg ccaggcgga gcgagctagg cttccgcaga 240  
 gccgcaatga tcttccggca gcatgagact gncaggatgg gttgtggtgc tgggtggcttg 300  
 gcgagccaaa tcatgcctcg gatgcatgat gccaaccttg gccgggaaga agacangacg 360  
 acggcgccat tg 372

<210> 8316  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-A6  
  
 <400> 8316

ttcccggggc gacggggggc accaagaggg gacctggcta ccattactac tgcagttccc 60  
 gcgtggttgg aagatgtcca aggcgggttac caagaagatg cagaagctca acgcctactg 120  
 accaaactca ccagttcgcc ggagggtttt gatgggtttg tgctccagga cggcatcatc 180  
 cgccacaggg gacgagtgtg gctgggagca aatgtggctt tgcaaagaca ggtccttgaa 240  
 gcgttgacac caggcgctat cgggtgggcac tctggtttca atgccacgta ccggcggtgtg 300  
 cgacatctct tcacgtggcc gagcctgaaa catcacgtga agttattcct cgaagcgtgc 360  
 cagacttgca agcaagccaa gccagaaagg attcgttacc cgggattgat cgagcctctt 420  
 cctgtac 427

<210> 8317  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A7

<400> 8317

cggggataga tattgctcta gtgcttcact tatatctttt agagcacaac ggtggcttaa 60  
ttttgtagaa attgctagtc tatcatgctt cacttatatt attttgagag tctcttagaa 120  
cagcatggta tttgctatgg ttataaaatt agtcctagaa tggtaggcat ccaagttggg 180  
tataataaaa actatcatag gaagtgaatt ggatgctatg atcaatttga tacttgataa 240  
ttgttttgag atatggaggt agtgatatta aagtcatgct agttgggtga ttatgaattt 300  
aaagaatgct tgtgttgaag ttagcaagtc ccgtagcatg cacgtatggt taaagttgtg 360  
taacaaattt gaaacatgaa gtgtccttgg gttgtgcatc cttatgagtg gcggtcgggg 420  
acgagcgatg gtcttt 436

<210> 8318

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-A9

<400> 8318

ccccgggtcga cgggcgcata gagtacaacg agttcgtggc gatgatgcag aagccggcgc 60  
tggggctggc gaagaaggcc ggggccgggc tggagagcag cttcagcatc ggcttcaggg 120  
aggcgctgag gatggcttga aggaggagga ggagctaggt ggtagtcatg gcgacgctaa 180  
tttcgttctg ctgctcgaag acgcttggtg tagagacatg gtgaggcgat tgagttttca 240  
tagggctgaa gtggcagcag ctccctggcg gtagcggagg gtcgggactc gggacaacat 300  
gtgtgtagta gaggcaggca ggcaggcccg gtgattttct tctcgctact ggattggttc 360  
aattgtgtat tatactgagt ataaactaca gaaagctt 398

<210> 8319

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B1

<400> 8319

taccgggtcag ctccgggtgc cggggagcac ataattgacg gcgagcacia ggagggcatg 60  
atggagaaga tcaaggacia gatcagcggc gacggccacg gcgacggcaa gaaggacggc 120  
gaccacaagg agaagaagga caagaagaag aagaaggaca agaagcacgg cgagggccac 180  
aaggacgacg acggccacgg cagcagcagc agcgacagcg acagcgactg agccagctcc 240  
ggccgcgctc cggcagcagc gtgcagtgtg ggcgagatcg atgaacgctt gggagaagtg 300  
tggcatacat atatgttgca gggtttgag cgtgtggtag catatgtatg taatgcgtga 360  
catgtctcat ggatcttggt atgtataata attagccggc tgcactgcac tgcacgggtgc 420  
ttgtaataat aacgttaatg aatcatgttg gta 453

<210> 8320  
<211> 441  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-B11  
<400> 8320

atgcccgggt cgacgggtgg cgccaaggct gaggccaggt tcaagcagat aactgaggcc 60  
tacgaggtac taagtgatcc agaaaagcgt gcaatttatg accaatatgg tgaagaaggt 120  
ttaaagggtg tgctccacc tggttcgcaa agccggaccg ccacagcttc tggctcaagt 180  
gggccaagta atttccgtta caatcctagt gatccagatg atatctttaa tgagttcatg 240  
gcgagcaaca agccatacac ctttgatcaa gaccgaaggc gctttcaacc agcacaccgg 300  
acctcagcag tgaatggtcg aagtgaagct tcttccagtt ctcagaagga gcctggtacc 360  
agtacaagcc atctggaaaa gccaccgcct gtggagaaga cttactttg cactcttgaa 420  
gagctgtata atggaacaaa a 441

<210> 8321  
<211> 252  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-B3  
<400> 8321

ggttccattc tacctttcga gagcattgct cgggtcaactt ctttaaatgg cacagacaga 60

tgatcacccc gtgttcgcct gaccatgcgc tcaccttttc gacgcgcaat tctgcgaccg 120  
aagctgccat aatcatataa tggatgtagt taaacaaggg atatagggaa accaatttgg 180  
aagaaaggtg aatagatata gccagtaccg gtaattttcc cgggcggtaa atcacccaag 240  
gaaccagaac tc 252

<210> 8322  
<211> 441  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B4

<400> 8322

acggtcgtag cttccgggtg cacgggttga taaaaattac tatagactat tctgtttttg 60  
acagattctg tttttcgtgt gttgtttgct tattttgatg aatctatggc tagtaatgga 120  
gtttataaac catagagaag ttggaataca gtaggtttaa caccaatata aataaataat 180  
gagttcatta cagtacctta aagtgggtgct ttgttttctt tcgctaacgg agctcacgag 240  
attttctgtt aagttttgtg ttgtgaagtt ttcaagtttt gggtaaagat ttgatggatt 300  
atggaacaag gagtggcaag agcctaagct tggggatgcc caaggcaccc caaggtaaaa 360  
tccaaggata accaaaagcc taagcttggg gattccccgg aaggcatccc ctcttttgtc 420  
ttcgtccatc ggtaacttta c 441

<210> 8323  
<211> 391  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B5

<400> 8323

gggaggggaac atcggtgatc tctgccgagg tgaagcctcc agtaaagcag caagtgagcc 60  
cggcgccatt caaggctgcc gtggagaacg tctacatgac cgacgcgatc acacgggctt 120  
ccaagatcat ggctcagtgc agcgcagcct tgttgaagag gtgagaccct gcgctaggta 180  
cgtcgccttg aggaagttga gtcagcggca gacgagagtt ttagttgctt ggcgagttca 240  
ctcaccagtt gtcgttgctt ggttggttgg gagcataaga tttggagtgc ctctacccta 300



gcgagatgcg gggagcagcg aaacgtgaaa gcagtgcacg tttctggaac gtgtgagaag 360  
cggagcatatc ttagtaagct tgttttgtcc t 391

<210> 8324  
<211> 426  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B8

<400> 8324

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cattataagg caccggcctc tgaattactt cacgccctgc ccatcagtc tccacctgaa 120  
ggagctcgtt gcgtgtacca agagcctgaa ttgactgccc attatatgca agtaattatg 180  
aagcctctga agcctgggtca agctccaagg accaaattcc tcgtgaggca attgctctat 240  
gtgccaagaa ctgtctatcg cattctgacg aagacaatga gtccgatcaa aggccacgac 300  
tcgtctgata aggaaattgt tggcatcatg aagaatctgc tattcagtgat catacatgcc 360  
attcctgtca actagcatga tttcttcatg aggactctgg aaaatgtcgc actctctccg 420  
tttgag 426

<210> 8325  
<211> 422  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-B9

<400> 8325

cgggtcgacg gggtagaaga gctttgtcaa ctttgtcaat atgaacgatt ctagctctag 60  
tgaccgtacg atgtccatcc aacggccgta gtgcttcttc aacctctggt cttcttgctc 120  
tagccgcca aagcagcgtt ggtcgtgccg catgctcctg cctcccggtg ccggctatgc 180  
tgccgcagag gcctcaccgc cccctactat tcccaccgct ggccaggccc tacggcgacg 240  
acagcctcac accgcagccg aaccagtga cctcgtact cctctccgag cgggcttcca 300  
ctgcgcgtct tccccggctc cgcgtcgtcc ccttcttagg cctcgcgctc gtccaccgcc 360  
gggtgctctc tgccgcggcat ggtcaacgtg gtcaaggaa gacttccatc ggaagagtac 420

<210> 8326  
 <211> 438  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-C1  
  
 <400> 8326

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 caaacttcgc cgggtgcatcc aaaccccggtg atacgatacg ctctatcaca cataaacctc 120  
 cttatatctt cctcaaaaca gccaccatac ctacctatta tggcatttcc atagccattc 180  
 cgagatatat tgccatgcaa cttccaccat catcatcatg acatacatta cttttgtcat 240  
 attgccattg catgatcatg tagttgacat cttatttgtg gcaaagccac cttgcattat 300  
 ttttcataca tgtcactctt gattcattgc accatcccag tacaccgccg gaggcattca 360  
 tatagagtca tatattgttc taagtttcaa gttgtaatct ttatgttgta atcaatagaa 420  
 gtgtgatgat catcatta 438

<210> 8327  
 <211> 433  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-C11  
  
 <400> 8327

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 gcggtgaagc acggcccgtg agtgggtctcg acgttgggga cacggtatgc tctcctcttc 120  
 ctagcccttt ccttgctacg gccatgagac ttcggccttg tatatgtttg catgttcaact 180  
 tgttgttgat catgtggtgt aggcatttca atctttggtg gcattcaagg cccggcacat 240  
 gacaagccat tcaactcttac gcattgttgg acgctcatcg acaattgccc taagttcaag 300  
 gaccaatacc gtgaactaca aaggaagaga tgactgaaga cagccaagtt cgccggagggt 360  
 ggagatggcg aggcgttgaa gaggccgagg ggcaagacca actccaaggt tgatgacata 420  
 cgtgatgcct cat 433

<210> 8328  
 <211> 416  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-C12  
  
 <400> 8328

ccgggtcgac ggggtgaacat aatttgtaat gctggcttct gcccctatgct cctggatgaa 60  
 acatgtagat tgcaagcatt acatcttact agggggcttc ataagcctct gctatctggt 120  
 agtctgttgt tgtgggtata gggttatgta aaaaaactgc attttttttc cggcaaataa 180  
 gcatatagtc accgtcaciaa tttccaatag gaaaaggcca ctacaccatc tggcacctaa 240  
 tgacaaaacg aagttccaaa gacaacacca acaggtcttc acacaattgt gcctattggc 300  
 cacaacaciaa caaatgttga gaagtttcaa cctggtcatg aaatgagcac ataggattac 360  
 cagaccattt tccttcctca tcacctcct agttagggga gtatcaccaa agaact 416

<210> 8329  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-044-Q1-E1-C3  
  
 <400> 8329

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 tggatcaga tttccagggt gctcggtagg attttacagt ttttcgtagt ttagatcgag 120  
 tctgttcttc atacctacag tccacgaaaa agccaaaaaa aaaaattacg gttagtcat 180  
 catatccgaa ccaatctgag cctttgcata atccttttag ggttttgctt tgttgaattt 240  
 gcggttgcat cgtcgtgtct agttgctggt cttaaagtct agtcttttag agtttcgagt 300  
 tctggtcata agttgtcatg ccgcccgcgc accatcataa tcgcccctgc catctaccac 360  
 caccgcttat ccgccacggc tccgaatcc 389

<210> 8330  
 <211> 426  
 <212> DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-044-Q1-E1-C7

<400>      8330

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ttccggccga cggggagggtt gagaagctga ttggcaggat agtgaagtgg ctgaagcccg   60
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tgaacccgac gcactaccgg gagccgaggt tctacaccaa ggtgtttaag gaatgccact  180
cctatgacca agaggggaat tcctttgagc tttctctggt aacttccaag tgcattggag  240
cttatgtgaa aagcaagaag aaccagaacc agatatgttg gctgtgggag aagggtcaagt  300
gcacagaaga caaaggcttt cagagattcc tggacaatgt gcagtacaaa tccactggaa  360
tcttgcgtaa tgagcgcggtg tttggggagg gttatgttag caccggtgga ttcgagacca  420
caaagg                                           426

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<210>      8331

<211>      445

<212>      DNA

<213>      Triticum aestivum

<223>      Clone ID: LIB104-044-Q1-E1-D1

<400>      8331

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taggagcatg tgcgtagtac tttgtttcga taactaatag atttttgcaa taagtatgtg  180
agttctttat gactaatggt gagtccatgg attatacgca ctcacaccct tccaccattg  240
ctagcctctc tagtgccggc caactttcgc tagtacctta aaccatcat ataccttct  300
caaaacagcc accataccta cctattatgg cgtttgcata gccatttcga gatatatattg  360
catgcaactt tccaccattc tgcttattat gacacactcc atcattgtca tactactttg  420
catgatcatg tagttgacat cgtat                                           445

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<210>      8332

<211>      421

<212>      DNA

<213>      Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-044-Q1-E1-D10

<400> 8332

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cactagaatt atcccaagtt tcacttcaca tcgtgatgtt gttttacctt tttcctgtca 180  
ttgtcctgct ataacggata gcgctccctg ttggcgccgc cgccggcggg gatgccctag 240  
tgggtggaggg tgtatgtcct cttccgcggg gtgcccctgc ttgtacctag atggttactc 300  
tttccgtcca ttgtcacggg ctaacattgt gataatatca gtctgggtaa tgttagatta 360  
anaaaanaaa nnnnaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagcggccg 420  
c 421

<210> 8333  
<211> 250  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D12

<400> 8333

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tttttttttt catatctagc aagcttcac ccatgttcaca ttgattgtca cccaccctcc 120  
tcgacctgag tacctagttt tctatactac gtctcggctc gtacttcagt tctagattta 180  
gattagttta ataaagtggg actagaaaac atcaccatcg catgcatgga caaaaggcaa 240  
aagcgacaag 250

<210> 8334  
<211> 429  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D3

<400> 8334

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aaaaacctac ccaagcacag cagcgtacag gagcgacgca caattacaag ctgatattct 120

gttgacaat ggaggctata accaattact tttacgggaa caatagcacc taggcaattt 180  
gatgggtagg tatgaacaaa attggaactg cacatgtact gctaagtgat tcaatacaca 240  
cattaccaat cgaggaggag aatgatggtc gcggcggcct ctgtgagtca tggtcggcaa 300  
aaggagtcaa ttcattgtcc acgacgggtg tgcttctgcg cttggcgctcg gcttccggga 360  
agcagatccg agaccgtgga agacgggtgcc cgggaaaacg ctccgtgtac gacgaccacc 420  
gtggaccgg 429

<210> 8335  
<211> 200  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D5

<400> 8335

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acgagcgcta tttatttgcg aagcctttgg ttgaatctta gtggaagatt ctttcgagtt 120  
cgagtagata attttgtcgg ttttgaggaa gtttgagggtt gcttcacgt gtggaactag 180  
atcaggacgt tatttagttt 200

<210> 8336  
<211> 422  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-D7

<400> 8336

ttcggggtcg accttcaatg ccaatgaaag gtactcttcg ggatcattgc ttccagtaaa 60  
tttgggcatg gtgaacttta gtttgccgta gcgttgctct tcattgtgtt ggggtcgagg 120  
gtgatgacga cttgacaag gaggattgtc tccctcaact tgctcttata atggagggtt 180  
gtcaacctca ttttgttctt ggcgaacttg aggttcttgt cgaggagctt gtggaacttg 240  
acgatgcagt cgagcttgat ggttcctctc ttgaacttcc tcgcgaagcg cttcttggtg 300  
ctcgcgcgtg tgaccgttgc ggtcggcgat ggcgcgactt gtttcatgga gggcacattg 360  
ggccttgagt gcttgagctt cacgtcgttg ttgttggtgt cggagcgcct cgggtgtctg 420

ct

422

<210> 8337  
<211> 437  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-D9  
  
<400> 8337

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gagcatccaa gttgggtata ataaaaacta ccatagaaaa gaattggatg ctatgatcaa 120  
tatgatgctt gataattggt ttgagatatg gaggtagtta tattaaagtc atgctagtgtg 180  
aggtgattat gaaaagtact tgtgttgagg gttgtgattc ccgtagcatg cacgtatggg 240  
gaaccgcttt gtgatgaagt tggagaacaa ttttatttat tgattgtctt ccttatgagt 300  
ggcggtcggg gacgagcgat gatcttttcc taccaatcta tccccctagg agcatgcaca 360  
tagtgctttg gtttttgatt acttctagat ttttgcaaca agtatatgag ttattttgac 420  
taatgttgag tccatgg 437

<210> 8338  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-E3  
  
<400> 8338

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ggctgaagcc cggtgggcat attttcatca gggagtcctg ctccaccag tctggggatt 120  
ccaagaggaa agtgaacccg acgcactacc gggagccaag gttttacacc aagggtgttta 180  
aggaatgcca ctctatgac caagatggga attcctttga gctttctctg gtaacttcca 240  
agtgcattgg agcttatgtg aagagcaaga agaaccagaa ccagatatgt tggctatggg 300  
agaagggtcaa gtgcacagaa gacaaaggct ttcagagatt cctggacaat gtgcagtaca 360  
aatccactgg aatcctgcgt tatgagcgcg tgtttgggga gggttatgtc agcatcgggtg 420  
gattccagac cacaaaacga at 442

<210> 8339  
 <211> 341  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-E4  
  
 <400> 8339

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atgataatgt cgactgcggc gttgggtctcg gatgtgtaca gaataattcc tcgctatcag  120
gtggttaataa cgcaccggaa cggacgctgt tcttgatgcg cggaatggca aggcaaagca  180
ttctttcacc gagcaatggt gattgacgac ttgattacag acaagataga tttggcacat  240
tcttacctgt aaagataatt tgccaaataa agccgtttat aagctttgcc actttgataa  300
tctcttgtag tgacacaatt tgaaagaatt cctttgagat c                          341
  
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<210> 8340  
 <211> 303  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-E6  
  
 <400> 8340

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tacggtcacc attccggctg acgggcgaca ggagagtgat caagcagagc gaccttggcc   60
tctatgtgtt tgcgtcgaag ccgtcgagcg gcgcggccat actgaggctg tagatcgacc  120
accgccggcc gtggccggtc acttgtagat gcacacatac tctcgaataa acgcgtgctc  180
gaggcgagca cgctgccatt agctaattta gtccccgccc atgcgtgtct gaatgtacaa  240
tgccagtaca atgtgtagta gttatcggtg tttattatgg gcgatctgac tgccacgtta  300
tct                                                                    303
  
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<210> 8341  
 <211> 442  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-044-Q1-E1-E9  
  
 <400> 8341



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aagatcgtgc cacatcaaga acacgagaga gagagagaga tcaaacacat agctactgcg 120  
acataccctc agccccgagg gtgaactact ccctcctcgt catggagagc gccgggatga 180  
tgaagatggc caccggtgag ggttcccctc ccccggcagg gtgccggaac aggggtcccga 240  
ttggtttttg gtggctacag aggtttgcgg cggcggaact cctgatctag gtttctttct 300  
ggaagtttct gtatatgtaa ggggttttgg caccgagaac aagtcagggtg ggtctccggg 360  
ctgtccacga ggcagggggc gcgcccccca ccctcgtggg cagcccgga ctcttctggc 420  
ccaactcttt tcttctgggg gg 442

<210> 8342  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-F10  
<400> 8342

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gatcgtggag atttgggacg ccatggattt gggaggaggg ttaggattag tggaactgcc 120  
gtaatgtgaa tggacgtgac gactaggagc aaaccacat agtattgaag gacgtgcggg 180  
gacgagtagg agcgaactgc cagcgtgcga atggcaggggt agtggctttc cattctccca 240  
tgatacgggc ttccgagagc ccttgatct gagatcgaac ggttgcatgg tgtgattcta 300  
gacctatggg tgaatatcct atcctgaagg gttattctgc aaattttcag caacttagca 360  
tgcgaccgtt tgatctcaga tctaagggt gccagtagcc cgtatcatgg tcgcgcctac 420  
cacgaccgtc gcg 433

<210> 8343  
<211> 438  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-F12  
<400> 8343

cgggtcgacc gcgaaggaa gctcacctac ggcggctact ccagcatggt ggtggtgcac 60

gagcgcttcg tgggtccggtt cccggacgcc atgccgctgg acaagggcgc gcccctgctg 120  
 tgggccggca tcaccgtgta ccccccatg aagtaccacg ggctgaacgc tcccgggatg 180  
 cacctcggcg tgctgggcct gggcgggctc ggtcacgtcg cagtcaagtt cggcaaggcc 240  
 ttcgggatga aggtgacggg gatcagctca tcgccgggga agaagcagga ggccctcgag 300  
 aggctaggcg ccgacggctt cgttgtcagc aagaacgccg acgagatgaa ggctgcatg 360  
 agcaccatgg atggcatcat aaacacgggtg tctgcaaaca tccccatggc ccctctcttc 420  
 gggctactca agcccaac 438

<210> 8344  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-044-Q1-E1-F3  
 <400> 8344

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 gaaggacggc gagcacaagg agggcatgat ggagaagatc aaggacaaga tcagcggcga 120  
 cggcaagaag gacggcgacc acaaggagaa gaaggacaag aagaagaaga aggacaagaa 180  
 gcacggcgag ggccacaagg acgacgacgg ccacggcagc agcagcagcg acagcgacag 240  
 cgactgagcc agtccggcc cgcgctccgg cagcgtgcag tgtaggcgag atcgatgatg 300  
 aacacttggg agaagtgtga cagacatata tggtgcaggg ttgggagcgt gtggtagcat 360  
 atgtatgtaa tgcgtgacat gcctcatgga tcttgtgatg tataataatt agccggccgc 420  
 ac 422

<210> 8345  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-044-Q1-E1-F4  
 <400> 8345

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 agtagggtgt tgcaagactt ccaactgtga ccagctgcag ttggttcagc aaaaatataa 120

atctctggag catcaacagc aaaaatataa atctctagag catcaacaga aagaaaacga 180  
tagaaaatag actatttgag cagcagctgg tgcggtagtc tgagtagaga tttcatggta 240  
gcgaaggaac ttgccgtat aattgaggcc aacttcacag aaggatcaac acccgaagac 300  
aacaatctga atcgtatttc tcatagataa gatatgttgc taatcatctt aatgatacaa 360  
ctttacaatg agacattgta caaaaaacaa acaagtatct ttggagtctg gatgatgata 420

<210> 8346  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-F9  
  
<400> 8346

gacgggcata tacatacaga cagacaggag agctgccttc cgagccttgg aaaaaaggca 60  
ctgctgcctt tgctctgctc atatccggac tcagatgata tgaacatgga ttgcattgca 120  
gcaggcgatg aagaggccaa catagtctcg gacttttggg aaaccagaag aggttattag 180  
catgtaggag aagaggagcg tgtaaaggaa actcaaggca atgcttgtat gtaacataca 240  
aaaaataaca agttgtaaaa gcggcctcaa gttttcaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aggaaaaaaa aaaaaaaaaa 360  
aaaaaaaaaa aagcgggctc cccaaagggt tcaagctt 398

<210> 8347  
<211> 455  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-G1  
  
<400> 8347

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tttaatgatg atgtgttcgg cgtgcagatt gtcttcagca ttgcaaggca gggtctttct 120  
ccggatactc caatgcagtc ctccacacat aatagetgta tccgggtccg ttaaataatt 180  
acagccttaa gctgcaaggg taaaaatatt caaaacaaag taagtgcgat ccataagcaa 240  
tttttccgggt gaggcattat gtcttgacct tgtagtatt ctgaactgtt ttacaatcct 300

cgcttcgtgt tttgggttgt ggctaggaat taagttaatg gcaaacaaac cgtttttttg 360  
gcgtgtgttt aatttctaac cctaagcggc tgcattggtg aagcctgcaa cactgcacgg 420  
atgcatccat tacattcctt ggcttataaa atttc 455

<210> 8348  
<211> 433  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-G10  
<400> 8348

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aaacccatgc ttcaacatga taaattagta gaaactatga tcaaactata gtagggggcca 120  
aaacctgctg attacatata attagcaact acaaattgtca tttaatgaca ttttcaacct 180  
tgacattggc acatatacta tgcacactag tagcaggcgc atctagacat cctcatcctc 240  
ctccgcggac gaaatatcat ccatccacac ataggggtcg gactcatgag ctgtagccac 300  
aatgtttgct cataatcgat ggtatctgag atgtatttga tgatgatgat gatttttctt 360  
ttggatgacg cttggcatga ccgcggcact gaggtgtcct gcgcattgga cgtacgtgaa 420  
gaaactcggg gct 433

<210> 8349  
<211> 432  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-044-Q1-E1-G12  
<400> 8349

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gtgtgattcc gatgccaca gggaaatgag atatgtatgc gtgtgagaga gattgcacaa 120  
ttcattcacg tatcactatc tagcgatcgt ggacgtgcat cgcttgaaca taagtcaata 180  
tctacttcgt atcgtggcca aaggtacaat atcgattcaa cgctataaag attggacact 240  
cacatatcac atttttttct atttcaataa accttttcag ttgtgcatgc caaagttaca 300  
gtgatgtttc ttcaaacaac caatgtagct atcatgtata tgcaccattg ttactcttgc 360

attcaaattc attagtcttg gatgatttat gtttccattt tgaagtaata tatgtaatat 420  
tcatatatga at 432

<210> 8350  
<211> 428  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-G2  
  
<400> 8350

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gatgccccgcc cacttgatgt acgacgggca ggacgacaac ctgtttgagc acttcagcgc 120  
ggtggctcaa cggctgggcg tctacaccgc catagactac gcggacatcc tcgactttct 180  
ggtgcagagg tggaacgtcg ccaacctcac tgggctgtct ggggaaggga ggcgggctca 240  
ggatttcttc tgctcactgg gaccaaggtt caggaagctg gaggagcgag ctcagggcag 300  
ggcgaagcag ttaccggttg ttcctttcag ctggatccat ggtcggcaag tgcaactttg 360  
agtgcattg caaaacaatt ataagacgat ttgttcttct tattttcaaa atatgaagca 420  
actgttga 428

<210> 8351  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-G9  
  
<400> 8351

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ttaccgtgag gaccgactgg aacaaagagg tggccgaagc gaggaagaaga ttgaacaaat 120  
gggaaggcaa caagatgcct ctattagcag gccagaatg aaacagtgga tcctgtatat 180  
gatcaacgga aatgtggtcc gttcgcaagt tgatctccct aaaatgtgta aagtgcattg 240  
ttcatcgtgc aattcaccat tgaaattccc tacttccgtt ctgctattcc cgcttcgcaa 300  
gcacggtagc agcggcgatc ttgtcatggt actagcgagt aacgggattc tatggcgatg 360  
atagattagt gtggatgaga tcactttttt tgtgtgagat atcaatattg ttggactgca 420

ctaagggtac

430

<210> 8352  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-044-Q1-E1-H1  
  
<400> 8352

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gcagagcctc gaacgggtccg agaatgagct cggccttgcc aagaagtagc tccaggataa 120  
ggaaggtaag taatacctta tgaaagtagt accttataga aaaggatttg gttgcaaaaa 180  
atgacaagaa taacgtgggt attgcagggg ccacgaatga ggtggcgacc ctgaaggaag 240  
cgggtgtccaa ggtcgaaagc agtgcggcct tggagcgac cgagcgagag aagcaggagg 300  
cgcggtggc cgaggtgcgg caagagctcc aggctctcgt ggaaaaacat gagaatttgg 360  
aaggttactc caggggcccg agagtcagag cttgcctcgg ctcttgagag tggcaaagcc 420  
gcta 424

<210> 8353  
<211> 426  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-044-Q1-E1-H10  
  
<400> 8353

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atggtttata tatgcctttg cctgtaccta gtgtgataga ggcggggtgt cccgatcttt 120  
cgatgagatg ataaccatcg atttggtgga gacgactttg acgatccgac tacaacgtg 180  
caacgacgtt gtgccttagc aatcgctaaa ccaactccga gaggttattg accacgctgg 240  
agcagcatca acctgaccac gaaggtctat tctgcaagc aatcgaagaa caagcaagaa 300  
tatgataaaa gcaatctgaa tatcggaat atgtatgaag tattgataat ggtggggatc 360  
cgaaaagtgg tcttggctctg gtcgttggac acaaacgaag cacacgaagt tgcaatggct 420

aacttt

426

<210> 8354

<211> 349

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-H2

<400> 8354

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accaagggcc acgaaattcc cccctcttcc tccatatata cagcccttag ggcacgttt 120

agaccttggg atttgtttag ttaaaagtta gccattgcaa cttcgtgtac gtcgtttgtg 180

tccaacgacc agaccaagac cgcttacgga tctccaccat tatcaatacc tccatatatat 240

ttgcaatatt cagattgctt tatcatattc ttgctcgttc ttcgattgct tgcaggaata 300

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<210> 8355

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-044-Q1-E1-H6

<400> 8355

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gggggcttgg ttggatctt cattttgttt ttcccttgtt caaatttgtt taggttcttt 120

cgccactgc catggttggc attggcaatg ctggttgatt gggttggatt gggttgtgag 180

aggggcaagc gatgagcaaa gataagggtt gggctgagct ttcctaagga gaggagagct 240

tactggagc ccaattccgg tgcccaaagt gagcacattt cctgtgagaa attcacccca 300

aatctgcact gtttttggtg cgccatagtg gtggatgcca tcttaagttg catatggtga 360

gatgctagct gttggatgca gtagtagcac tgaaaggctg ggggttggc cattgtttat 420

agagccaaga aga 433

<210> 8356

<211> 385

<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-045-Q1-E1-A1

<400>       8356

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ccttgctgca atccgtgttg aattctcctc atgcttatag ccaaaataaa gcttttacta   120

aacatatcgt tgatgctttg atgcaatctt atgaagaaaa acttgaatta gaagtttcta   180

ccctagaaaa ctttatgatg agtgggaatc cactattaaa attaaaaata aaaatcatga   240

aggctatgca ttgtgtgatt tgggtgctag tgtttccacg attccaaaaa cattatgcaa   300

tgtgctaggt ttccgtgaat ttgatgattg ctctttaaac ttgcaccttg cggattccgc   360

cattaagaaa cctatgggaa ggatt   385

<210>       8357

<211>       156

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-045-Q1-E1-A10

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ctatttttaa cagcattgtc tcccaaatag aacagccaag tcacattctt tgcaatttat   120

ggattcacat ttacacctat ttttcacagc ccatgt                                   156

<210>       8358

<211>       257

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-045-Q1-E1-A12

<400>       8358

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ttataaaatt actcctaata taatgggcat ccaagatagg tataaaatta gtcctaattt   120

tcatataaag tgcattgaat actatgagaa gtttgctact ttatgattgt tttgaggtat   180

gaagatggtg atattagaga catgctagtg gagtaattgt ggatttgaga gatacttgtg   240



ttaaagtttg tgattcc

257

<210> 8359

<211> 262

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-A2

<400> 8359

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tgtctcttcc cgtgttgaat tctctccatg cgtatagcca aaatatatct ttacaaggg 120

gtggcggttg tgctttgctg caatcttatg aagaaaaact tgaattagaa gtttctactc 180

tacaagaatt ttataatgag tgggaatcca atattataat taatattaaa aattattatc 240

gatatgcatt gtgtgatttg gg 262

<210> 8360

<211> 280

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-A5

<400> 8360

catcttcgat gaggaaggcg ggcggccgga cgccatcatg atcctgacgg tgaagcgcg 60

caacatctgc agcttcatct cggagaccaa ccccgggcac gtgcgggggt gggagaccaa 120

ggacagccag ctgacgatgg tggcggacca cctgaagccg cgggcggtgc tgatgtgcc 180

ggagaacaag atgatccagt aggtggtgtt cgccagctac gggaaccgc tggggatctg 240

cggcaactac acgtttggta cctgccacac gcccaaggcc 280

<210> 8361

<211> 350

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-A8

<400> 8361

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tgggctcagc taccaccatc tgcagtata agacaggaac actaacacct aatcatatga 120  
 gtgttgtaa gacctgcatt tgtggaaata tcagagaggt taacagtcct cagaatgcgt 180  
 ctaagttgtg ttcagaactt ccagaaaatg ttgtcagaac tcttctcgag tctatattta 240  
 ccaatacagg tggtagaggt gttattaacc aagatgggaa acaccagatc cttggtaccc 300  
 caacagaggc agccatattg gagtttgcaa tgtcaatagg tggaaacttt 350

<210> 8362  
 <211> 275  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-A9

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 agattcatgt gaaacttgct acacactcag ataccttggc atggggccat ggttttttca 120  
 gcagttaagg aatgttcaac gagtttgaca taatgttcac acacttacia ctttttcggc 180  
 acttattcga tgttctgggt tcaaaagtct aacctatcca cagctccatg ttgggggaaa 240  
 ctccccctgg attggtcaca gttttttcgc ctttt 275

<210> 8363  
 <211> 325  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-B1

<400> 8363  
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 ccatccatct acctacagtc atatgggttag tcttttagata gcagagggca tttgggcaca 180  
 aaagaagacg actattaccg tgccagtgtc agaagagctg agtggtgcaa ggaagagtag 240  
 cgtgtccgtg acttttggtc gttccgtcgt tactttttct ctgtgttcca gtcgtcggct 300  
 taagtttggg cggctgtcgt cgtcg 325

<210> 8364

<211> 391  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-045-Q1-E1-B10  
  
 <400> 8364  
  
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 actgtcgtcc gcaatgattg ggtcggggccc cagatgacat ggggtgggtta gcgtcgccgt 120  
 gcagcatcca ttctaagtta gtcccacctc ggtcgccgaa ggatgtaccg atcagtttat 180  
 atagccgcct ccggtattcc atgcatggtc atatcttaaa ttgttatata cctctatata 240  
 tctgctccgc aatacactat caggcaatga actgccctgg cagttaggta aagtcattat 300  
 acaatattaa atatgtttac tttgtcatTT tttttaacct tccaactgtg aaacattttt 360  
 tttgaaatat tgcctcccaa caccattttt t 391

<210> 8365  
 <211> 192  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-045-Q1-E1-B12  
  
 <400> 8365  
  
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 gaggtttgtga gctgtgtgaa gagcatcaaa atattatcat ctgttgaagt gcaacagatg 120  
 agtttggatg gcgaccttgg cggtatccct tcacaaacac aagcctgtat tggttccgat 180  
 gatgcaaattg ca 192

<210> 8366  
 <211> 354  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-045-Q1-E1-B4  
  
 <400> 8366  
  
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 cgcctcgtgt aagaggcgaa cctgtcgccc ctcatggtgt acttcatggc caacaacgcg 120

tgcttgccctg accacttata tgcacaccac gacaagcccc tcgaggagac agcagtccca 180  
 cgtcttgccct tgatctgatt tcgttggcct gtgggtcaact ttctagccca tcgatacatt 240  
 atttttttcc attacattgt tgccgttcat atcgcttagc ttctgcctcg gttcgttgct 300  
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<210> 8367  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-B5  
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 caccaccatc cagctcgacg agctcgccgc cgagaccgcc gccgcgctca cggcctccca 180  
 gcctgactat gcctccctcg cggcgaggat tgttggtgcc accctgctgc caagtgggaa 240  
 tactctgtgt ggcgcttgct agtagagagc attctggtac aaaggtacac gaactaatag 300  
 ggaaacttct gtcattttct ttgggtctctg atccataaat ggtcc 345

<210> 8368  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-B7  
 <400> 8368

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 cgctcaatac aaagaggctt gatgatgata cagagaatct tgctcatgag cgtgtgccgt 120  
 cggagctgaa gaagagcatt atgcaggcta gaacggacaa gaagctcaca caggcacagc 180  
 ttgcacagct gatcaatgag aagccacaag tcatccagga gtacgagtca ggcaaggcta 240  
 tcccaaacca acagatcatc ggcaagctgg aaagggctct tggcacaag ctgcgaggca 300  
 agaagtgaag ctgcgtgcat ctgacaggag tcgagtcttt caagagagga tcttggctgg 360  
 gcaagtttac cgctaaataa agcttgtcta ctaaatcatg cgact 405

<210> 8369  
 <211> 389  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-B9  
 <400> 8369

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 gcccggtgag attttacagt ttttcgcagc tttgatcgag gctgtgcgtc agacctacag 120  
 tccacgaaaa agccacagaa aaattagggt tagttcatca tatccgaacc aatctgagcc 180  
 tttgcataaa ctttttaggg ttttgctttg ttgaaattgc ggctgcatcg tcctgtctag 240  
 ttgctgggtct tagagtctag tcttttagag tttcgagttc tggtcataag ttgtcacgcc 300  
 gccgccgcac catcatcatc gcccgtgcca tctaccacca ccgcttatcc gccagcgctt 360  
 cgaatccgta tccatatacc accacagct 389

<210> 8370  
 <211> 299  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-C1  
 <400> 8370

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 tgtccccgat cgggacgacg gtgtggcatc gacgagcgac accatcatcg tcgtcgagga 180  
 gattaggaat ggccatcccg tcgagggtgc gatcgcgctt accgtcgagg cgggaagaga 240  
 ccgtctgcgg tgcgaggatt atgaacggtg gtcgggccat gcgaatgaag acgacgcgg 299

<210> 8371  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-C10  
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 ttgctagaat actcattgtg cttcacttat atcttttgag cttgatagtt ttgctcattg 180  
 tgcttcactt atatctttaa gcttgatagt tttgctcatt gtgcttcaact tataatctttt 240  
 gagcttgaaa tttttgctct agtgcttcac ttacatattt tagagcacgg tgggtggcttt 300  
 gttttaaaga atacattgat ctctcatgct tcaacttagat tattttgaga gtcgttaata 360  
 ccatggtaat ttgcttaatg tcaaaatact tgggtattcag gatatatgaa acttt 415

<210> 8372  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-C11

<400> 8372

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 cggaacgtgt gatgactgat gcttgcatga ttgtttgcac ttcgctgctc cgttatcacc 180  
 ctctgttctt ttctggagtt ctcttttccc tggtaaatga ttaagtgtat gttgtgagtt 240  
 gtgacattga ttaactggaa aatgtatcat tcagatgctc attaactgcg tccgcgttgc 300  
 taatactact ccattatttt atgctc 326

<210> 8373  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-C12

<400> 8373

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 ttatactcc cctcctcca caagcatcaa tccatggctt gctcgaaaca acgagtggtg 180  
 ccaacattca atgggtcaca gggggagttt tctttaatta ttttgatttg ctttgatctt 240

tttggatcat gggactgggc atcccgtta cgggccctt ctcgtgaatg aggagcggag 300  
 tccactcctc ttgagaataa cccacctagc atggaagata taagtaaccc tagttgcacc 360  
 tgagctgctc cagcatataa cacagaattt catttga 397

<210> 8374  
 <211> 324  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-C3  
 <400> 8374

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 tcttctttta tggggttttt atgatgttat ttttttgttt ttttgttttt ttttttttct 120  
 tttgggtttt tttttgtttt tggttttttt tttgtttggt gttttttttt ttcttttttt 180  
 tttttttttt ttttttgttt ggatgatttg ttcttttttg tttgttggtt tgttttttct 240  
 tatttttttt tctttttttg tatttgtttt ttttttggtt tttttgtttt tttttttttt 300  
 tagtttggtt tttcttttgt tttt 324

<210> 8375  
 <211> 245  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-C5  
 <400> 8375

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 catgtggcca aaaaaattta tgtatgaaag ggttggttaa tgttttgaat aacaatttgg 120  
 cgagtctaata gtggcatcgg cctgcctaac aaaacggcca acccacacca tggctcacia 180  
 ctcgtactgt actacgaccc agccaccacc cccacacgca cacacccaaa cagcacatcg 240  
 taaca 245

<210> 8376  
 <211> 261  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-C8

<400> 8376

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gtcaaccaag ccatagccta tacttgactt gcagttgcac atgtaagctt ccaggcatga 120  
ggtagtcttc cctctctttg agtcagggtg aagctttccg caagatgtca tggcgctctc 180  
ccatgcatcc cggccatcta ctggtttctc cagggtgctc gtcaaccgtc cttcacccat 240  
tactctctag tgaactcttg t 261

<210> 8377

<211> 301

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-C9

<400> 8377

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cgatccatat accgtttcaa aggttatatg cgtgttccat cctaagcata cttatagttc 120  
tttagataca acttttgtga tatttttagct taagcattag cataggactg gccactgatt 180  
attgcagttt ggaaatatgt tgaaagaaaa ctttactgtc aaaaaaccct ccaaataaaa 240  
taggatgcat tgttaaattg actgtgcctt aacccttggt tggataaac ttcattggatg 300  
a 301

<210> 8378

<211> 181

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D10

<400> 8378

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atgctatggt tagattttat ctttaattctt ccttcgtagt tgcgatgctc gtcagagggg 180  
t 181



<210> 8379  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-045-Q1-E1-D11  
  
 <400> 8379

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 cctacatgac ggagctggag gtcaaggcca aggacctga gctccgcaat gccgagctgg 120  
 agcagaaggt ctccaccctc cagaacgaga acaacacgct ccgccagata ctgaagaaca 180  
 cgacggcgca cgccgggaag aagccgagcg gcggcaaggg gggagacagc ggcaagaagc 240  
 accaccacca cttcggcaag ggctagtatc aagaccgagc ttctctgctg cgacgatggg 300  
 tgctacgaac caccacaagt ctgcccattc gaccattgtt aggacactgc tgttgttgtt 360  
 tgctgccgca gtttgacgct tggcttgtct tcttcttttt cactcctctc ttctccac 418

<210> 8380  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-045-Q1-E1-D12  
  
 <400> 8380

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 agctgtgtgc ggtggtgtca taaggagcct atccattctc actagaatta tcccaagttt 120  
 cacttcacat cgtgatgttg ttttaccttt ttctgtaat ccggtggata cctcccccg 180  
 ccgggctggc ctggttacc tatgccattt gttccggtgc aagggtacgg agctccacct 240  
 ggtgcgtaac ctacccccg aggattgctt ccaactcggt tgtcactaga acattaccaa 300  
 gttaacgtgt gctggttatg ccgtcgatga tatatacacg aacaaagtct tcaaagaaag 360  
 gaaaaaaagg taagggtggt ggcttc 386

<210> 8381  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D3

<400> 8381

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tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 180  
ttgttttttt tttttttttt tttttttttg tttttttttt tttttttttt tgtgggtttgt 240  
gttttttttt gtttgtttgt tttttgtgtt tttttgtgtt ttgttttttt ttatttttgtt 300  
tatttttgtt gtttgttgtt ttttttttgt tgtttttttt tttttttttt ttttttgtgtt 360  
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<210> 8382

<211> 224

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D4

<400> 8382

tacacaccta cctcggctta gacctttgaa cgtcgggccc gtaggtttca cgggccagag 60  
ttagaaaagt agtttccttc tactactaaa cattgggtctc acgggggtttc gggcgagtag 120  
agggctcttt ggcgcttcgt ttgatatttt gatacagaag cagtcacatt tagtgcactc 180  
atcagctttg aggtttggtc tatactgaca gcggtttact ttga 224

<210> 8383

<211> 297

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D6

<400> 8383

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ttttatttta ttttgttttg cttgctgttt gtatagcata ccaagatctg aaattcgggg 120  
gtgttaaata ttcttcagat atttacttaa ttattcgatt acacattgga tattaacgat 180  
atgactttcg gactagtgtg tcgttgctgc tagtgcactg actcatatct ttttataaca 240

ttgtagttgt cattatttat gtagaaataa gcataatgct catgcttaaa ctagaat 297

<210> 8384

<211> 299

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D7

<400> 8384

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tgatcccggt gattctcttg aaatatccct ttttgatgat gcttgctatg cttgtgggcg 120

ggatgccaat atgaattatg cttatggaga tgaacttgct atagttcctt atgttaaaca 180

tgacattgtt gccattgcac ccactcatga cagtcctatt atctttttga attatccaaa 240

ctacgctaga tcagacaagt ttgtgcttac taaggattag attgatgggt ttcgtttta 299

<210> 8385

<211> 175

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D8

<400> 8385

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gtgcgtgcgt atgtcgtgtg taatggtaat gttcgcgggtg tctacgacga ctggg 175

<210> 8386

<211> 308

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-D9

<400> 8386

tatccatcag gcaaggatat gatttggtat gtatatgtgt tggatatgctt gtcgaaagta 60

ttttcatatg tgtgtgtata tatatatgtg aaattgaatg aatttaaaaa aaaacagaga 120

aaacatgggc tatacatgct ctttgccgtc tgctgggtaca cagcaaagag ctttgctgtc 180

tgctggctga cagcaaatat gccatgtgtc agctacctgt ccaacttggg gcaataagct 240  
 ggctatttgg atgccttgtc gttaactggc aaacggcaaa acacgccgtt aaccactaa 300  
 ccgcctgt 308

<210> 8387  
 <211> 237  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-E1  
 <400> 8387

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 gggatcatga cggtgccatg ggtgcggaat ggctaaaggc attcaagggc tacctcgggg 120  
 accgatgac catgctgtcg taagagttct ttttctctgc tgtaaatacat gatgatggga 180  
 gcagtttttc tgtgtagctc tcacaaatat agaccacact caccacgcct gattttt 237

<210> 8388  
 <211> 227  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-E10  
 <400> 8388

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 catgaccact atttcgttcg ccaagaaaat ctttggcgac aaaatgcact gaagactcga 180  
 gctgtcccat tgaactgttc cgatatgttg gcattcgggg aaaattt 227

<210> 8389  
 <211> 375  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-E12  
 <400> 8389

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ggccggaacg tggagatgcc cggcctagge accaacgcgg agcagctcgc caagtctgca 120  
aagcacctgt ccgacgagcg gggccggcgc aaaaagggtgc ttcaaattaa ctaacagctg 180  
gcaggccggc tcgctctact ttgttgagtc ctgctcgttt ggtggatggt ttccattcag 240  
tttttttctt cttgtacaca gtgatgtaat atttgtacag ttatgtaata atactgtgcc 300  
acatttgga aatagattaa ggggtgtcca tgttttgccg gagcaagtgt tgattaaaaa 360  
aaaaaaacca actct 375

<210> 8390  
<211> 222  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-E5

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ggtgtgctta cgttattgtg tttctgaatt tggatgatt tgtggtgtc tctttggttc 180  
gtttgttgta ttttttcgtt ttagttattt ttgttctttg gt 222

<210> 8391  
<211> 252  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-E7

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gttggttttt gatggatgga cattcatgga ctgtaatgta tgtgtgcgac tagctggttt 180  
gaactcgtga gctgctgctg ggtatagtga gtcgtcttcg tttccagagt aataaagttg 240  
gttcgtccgg tc 252

<210> 8392  
<211> 317  
<212> DNA



cccaaataaa gtgtccggat acctctaagg acgtggggtt gagctg

226

<210> 8395  
<211> 365  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-045-Q1-E1-F4  
  
<400> 8395

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ttttt 365

<210> 8396  
<211> 311  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-045-Q1-E1-F7  
  
<400> 8396

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ggcgagtata tcgatcttta cgtctcggcc atttcgagac tcttcgtcat gtcggtgatc 180  
aaatcctgga ctccgaacta ctttcggtac atcacaacag ataagatcat aataccgatc 240  
gtcagcgaac gttaagcgct gcggatccta cgggggtcgag aactatgtag acatgaccga 300  
gacatgtctc c 311

<210> 8397  
<211> 151  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-F9

<400> 8397

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aatgcatgca tgcattgtaca ttcaattcgt tcactttcaa ggtgtatgat ttggactagt 120  
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<210> 8398

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G10

<400> 8398

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ttcagaaggg cgggcccctg ctgtccgcag gcatgagtgt gtatacgccc atgaattatc 120  
acgggctgaa tcgtcccgt gatgcaacgc ggcatactga gcctgggggg gctcggtcac 180  
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gggaagaatc acgaggtcct cgataggcta ggcgccgact gcttcgttgt caccagaaag 300  
gccgactaaa tgaaggctgc gatgagcacc atggatggca tcatacacac ggtgtttgca 360  
aacatcccca tgggccctct cttcgg 386

<210> 8399

<211> 215

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G11

<400> 8399

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accatatact ttggccggac tgttggaacta tgaagattca atattgaaga ttttgtcccg 180  
tgtccgggtg ggattctcct ttgcatggaa tgcaa 215



<210> 8400  
 <211> 365  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G12

<400> 8400

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atgagaaaag ggaggaatct ttatcctctt atataggcag tgtatatcaa acgccccccg 120
gcccggccgc tcaagcctta aaacttgccc gttcccatgg ggtcgtgcga atggcatggc 180
tatattacc aaaccgtatt gatgaggatc ccgcaataag tggacacgat ctccattttg 240
acaagacatg taaatagagg ccgcgcctcg agacgctaag cgggaggcga aaaacgggtcc 300
gaaatgctaa agaggccaca tgtggcgctt cgcgaaaag ttgtgagttg acgggcatta 360
ttttg 365
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<210> 8401  
 <211> 463  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G3

<400> 8401

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ttttttttct ttttctttct ttttgtcttc ttttttttct tttttctttt tttttttttc 180
tttttttttt tgtttttttt tttttttttt tctttttttt tttttttttt tttttttttt 240
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tttttttttt tctttttttt ctcttttttt tttttttttt tctttctttt ttttttcttt 360
tttttttctt ctctttcttt tgtttttggt ttctcttttg ttttgtgttt tttttttcta 420
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<210> 8402  
 <211> 99  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G5

<400> 8402

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gatttttgtt tcagttatat atatctttat ccctctcat 99

<210> 8403

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-G6

<400> 8403

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agtgagtgtg catccaactc gcttgctcat gggggcctag ggcatttgag gaagcccatc 120

ttaggaatat aactccaag ttccataatg aaacattccc actagtataa agcgacaact 180

tatgagactc actacatgaa taacaagggt ctattttgaa tcacattata tgagattcac 240

tacatgaaga acaacgtgct actttgaagt acatgtgttg aagctacata ctagcattgc 300

cccttttttt tcgttttttg gccttttttg gcctttcatt tttctctgt ttgctt 356

<210> 8404

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-H1

<400> 8404

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atcatatggg ttttctcccc ctctaccttc ttgtgatgaa ttgagtttta cctttgaggt 180

ttcactatta tggatttgag aactcttgat gtatgtcttg cgtgggatac cagtgggtgac 240

aatgggggtat tctattgatt cacttgatgt atgttttggc acacaactgc ggattcccca 300

ggtgacattg gggtaatcta tgcataatgg ttgatgcacg tgttttcctt gtttctccta 360

tagaaagctt ggggcactct ttgaagttct ctgtg 395

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 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-H10

<400> 8405

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 tgacaccatc tgcgactttt cagtcattta ccgatttggt tagaaacctt atcgcgcgtc 180  
 aaatggtcca tcactacaaa gtcgaactcg gaa 213

<210> 8406  
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 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-H11

<400> 8406

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 cggcaagggc aaggacgccg tcaagccctc atgtacggcg cagtatccct gcgtcaagcg 180  
 gcttcttgag cggcgccctcc tctcct 206

<210> 8407  
 <211> 77  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-045-Q1-E1-H2

<400> 8407

caccccgccc gctgggtgctg ctcatggctt ctttgctgtc gcgctcgctc tctctctctt 60  
 cccgccctgt cccgttc 77

<210> 8408  
 <211> 191

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-H6  
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 tacctcactg cggcacgcac atacactcat attctgttcc aagtactgcc ttgtacttcc 180  
 tcattttctcc c 191

<210> 8409  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-H7  
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 tttgtagtta tatctaattg tttgtaatgt ctggttgtat gaatattatg ttctatctaa 180  
 atttgatctt gtagttccga taacagagta ctaaaataga gtaggcataat gtctcgtaca 240  
 taagtacata gtcatttttc tcatacatag aatagacata agtctcacac agaaatagat 300  
 ggtaatgtct ctactgatag atagaagcgt cagtgcgcac gtctggcctg gcggggagggc 360  
 ggatctggaa tcagggaacca tcccaacctg tcgggtgccc taacatgacg atgaagaatc 420  
 tc 422

<210> 8410  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-045-Q1-E1-H8  
 <400> 8410

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 agctctgggt tgcgagaagc ataaacccca accttcccca aatgggacaa aaaatttacc 120

acggcatggt gatgccgctc cataatagca tgccaagttt catgaatttc agaagagttt 180  
 tggatttact agaatttaaa aaccaggcat ctcaaggttt tgccggcaat caacggtgcc 240  
 ctggtgtttg aaattcattg ccatttcttg catgggacct aagcacgtac ccaaggacac 300  
 agatttgatt tttcaaccaa ttgatatgca ctggagcatg tgcattgtact tcaaatttga 360  
 attatgcaca taaatgcact gaaaacccaa tttaagcatt aaaatg 406

<210> 8411  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A10  
 <400> 8411

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 ggcgagctca tcatgcacct ggagtgggtt aacctcccc caggcatgtc gcggtgattt 120  
 gatttgattt gcagaggag gccagctatt gtctgccttt tgtgatcgta atgttgcttc 180  
 ctctatatat gagctatgac aataattaag cgatgcctat ctcatcttt acataacacc 240  
 caccgtaatg atttgtggat ctaccagga tgggtgcgtat ataatatgag caacgtcgtg 300  
 gtgagatccg cagatcatca cagtgggtgc tacgtaaggc atgtgataga cttatgctgc 360  
 tgggggtaat gcttgctttc agttttgggt ctgcatatgt tgtatggcta ttttaataca 420  
 aa 422

<210> 8412  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A12  
 <400> 8412

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 gacaccacac aacagatatg ctgctgtcag cagtcctctc taaatagtca ctgcaattat 120  
 cgtataagta catcattgct gctgtcagca gtgctctcta aatagacact gcaattatca 180  
 tgtacatcat tgctgctgca atgaaccatt aagaattatt taaaatctag cctaccatct 240

gcgttgtcgt caacagaggg ttgaggcgga gttacaaaat ctgtatgaga aaccgagggg 300  
 ttgtccgagt cagcgacatc tttgttatct tcagagctgt cagaagcagc tgagatggcg 360  
 tcacctgatt ctgaatgtgt tctgtccaca tatgcttcag gtaaggagct ct 412

<210> 8413  
 <211> 349  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A3  
 <400> 8413

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 ggggggttct cattttggaa aatgcaccgc cctgggctaata taaatagttt ggaatctttt 120  
 aacaaaaggg ttttgggtatg atcaaaaaat tggcccaaaa agaagatcac caaagtgggg 180  
 tacagtaagc actatcatag gacgtgaatt ggatgctatg atcaacttga aacgtgataa 240  
 ttgttttgag atatggacgt agtgatatta aagtcatgct agttgggtga ttatgaattt 300  
 aaagaatgct tgtgttgaag ttatcaagtc acgtagcatg cacgtatgt 349

<210> 8414  
 <211> 374  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A4  
 <400> 8414

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 acacaagctt aaaccctact ttaagcgttg ctctgtaatg ggctgatttg gatctacatg 120  
 tatcatgcta tggttaggtt taccctaata ctctgtatgt aattgcggat gcttgaata 180  
 cgggttaatc atacttggga tgcacgtcca agaaaggaca gtattcaagc actgggtccat 240  
 ccacatatca aattatcaaa ttaatgaacg ccaatcatat gaccttgatc aaatctagct 300  
 tgacgataat tcccatgtgt cctcgggagc gttttccttc atataagaac ttgtatcga 360  
 ttgtcctttg ctac 374

<210> 8415  
 <211> 294  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-A5

<400> 8415

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 gatgtgtgct gcaggcagat ggtggggtaa cgtgggctcg gcggataggt tcgtgtcgtg 120  
 tcccattgcg gacgactaac aggtgctgat acgtgggggtg aagcatgacc tagggaaccg 180  
 cttgtccggc cgtgcacggt gtttccaact tatcatcccc atcgtcctga attatcggtc 240  
 ttctccgctt tcggttacat tggggatata ggctgtcatg atattacatc tgga 294

<210> 8416  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-A6

<400> 8416

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 tctaagcggc ataagtcttt agggactcaa aaaaacctct cgaacagcga ccggctctcg 180  
 cctcatcatg acggtcagtt ttagctttct cactgaggt gtcgcccag ctcaactggg 240  
 gcacaatcgc agtggttctc ccagcgctac cttagccgat ataacggaac gtaaggtagc 300  
 aaaacatggg agccgggcaa acccaactat tgaccaaga catgattcgg agccaatgca 360  
 tataatgcta taagttcggg gtgccgcact tgtgaaagtg ttc 403

<210> 8417  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-A7

<400> 8417

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agggaggaga gtccggaatg catcaatgat acggttttgg tgctcatacc caaggaaca 120  
 agccccactg ctttatctca gtatagacct atcagtttgt gcaatgtgtt atacaagata 180  
 gcatccaagg taattgcaaa tagactgaaa ctcatctgc cagacattat ctctgaggag 240  
 cagtccgctt ttgtccccgg aaggttaatt actgacaata taatttcagc ttatgagtgt 300  
 ctgcacttta tgaagcggtc tagatcaaaa tcaataatt tttgtgact gaaattggac 360  
 atgatgaagg cctatgatcg ggtagagtgg acatatctga gggctatcat gactaaactt 420  
 gggtttgc 428

<210> 8418  
 <211> 380  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A8  
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 ctgaacgcac agtttcaaaa catctggagt gtcacctaag gtaccaagtc cttgcaccag 120  
 atttccttgg atcttaatgt gagacatttg tcaaaggagg cttgtcacat gttgccgaag 180  
 acggtgtaga tattcccagt tatgacaaag ctccagcaca tgctcatttc caacaattga 240  
 aactcacttt tgatttgcta taactttaat atcgaagatg caaaacacta tcagacactg 300  
 aataatgcaa taaggtttta atatgtaaaa cgatcttggt gtaggtcgta tcacacgatg 360  
 tgtacagaca tgatgccaac 380

<210> 8419  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-A9  
 <400> 8419

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 cggcgacggc cacggcgacg gcaagaagga cggcgaccac aaggagaaga aggacacgaa 180



gaagaagaag gacaagaagc acggcgaggg ccacaaggac gacgacggcc acggcagcag 240  
cagcagcgac agcgacagcg actgagccaa ctccggccgc gctccggcag cagcgtgcag 300  
tgtaggcgaa atcgatgaac gcctgggaca agtgtggcat acatatatgt tgcagggttt 360  
ggagcgtgtg gtaccatatg tatgtaatgc gtgacatgt 399

<210> 8420  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
<223> unsure at all n locations  
<223> Clone ID: LIB104-046-Q1-E1-B1  
<400> 8420

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acattttaca catatatcac acggtgtttg acttctcatc ctcttaggtt gcaataagat 180  
ttttactggt cattacttag gcaggctcta atccgttatc agtgagtata gttagtata 240  
gtgttgtggg ggctcggcta gagggttatc acgagccgtc ctaagacata ctatcagtct 300  
gtgatgatgt gttcacgtca acctcaccca aaatggactg ctcaattgat tggtcctaa 360  
ttaaattag ttagtctgtt gattcanaat taatcctcca tttttccgc t 411

<210> 8421  
<211> 376  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-046-Q1-E1-B11  
<400> 8421

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aagcaagccc cggagtaaca gtgccgcttg ccaagaagga atctgcagag tttaaaggcc 180  
gaataggctg ctccggcgcca atgcggggag aaaatatcca cgatgacgag tgagctaaaa 240  
gatgccgcta gccgctgtgc aatccttgat gaggataata aagccaaaac ggttgatctt 300

aacaaggcct tacgagagggc gaaggaagca cgggtccgaat ctagagcgcc ccgggaggag 360  
atccgacaag ctgggg 376

<210> 8422  
<211> 375  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-B12  
  
<400> 8422

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tcgtgggttg gagaagttct accgtgccta cgacctgcag ctgggggtact tccttctctt 120  
caggtacgac gacgatgcca acatgctcat cgtgaagggtg ttcaacaaga ctatgtgtcg 180  
catgcgctac gctgcgatg atgatgccgg tacattctgc ctcttcttat tcctctacat 240  
ttggctttgt ctcacatcta ttgttaacgg tcattgttgc attttggaca ggtaatggga 300  
gcagcagcag cggcactggc tacagccaaa gcagcagcga ctatggctgt agcgaaagca 360  
gcagcgattc tggct 375

<210> 8423  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-B3  
  
<400> 8423

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aaaaaggaaa aagcccgcaa ggttcaagtt tggtttgaag gactaaggct ggggggtacaa 120  
cataggcaag gccgactttg aaggccggaa tttaaaggac ttccttgaaa gcaaccaatt 180  
caaattcgta agggtaaaact ttggttaacaa caaagaagtc ctgggtcgga taggcatcat 240  
tgtaggcaac accttcaacc tccagaagaa tcggctgggtg tcctctcctt agccttcaat 300  
gctgaccctg gcaagagcca tggttcatcc ttcatacagt aaactggaga aacctccata 360  
cacgtttcat cattatgcat ggcagcggaa tgtactagat atagaccaca tccactacgc 420  
tgcaatggat 430

<210> 8424  
<211> 456  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-B5

<400> 8424

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ccaagaggcc caagggtcgtc ttggatcctg agaacttcaa gaagtttaaa cttgtggaaa 180  
agacacaaat aagccataat gttgccaaat tccgatttgc tcttccaacc cctacctctg 240  
tgttaggcct tccaattggg caacatatca gttgcagagg tcaagatgct acaggtgaag 300  
aagtaatcag gccttacaca cctactacat tggattctga tctcggaaat tttcagcttg 360  
ttataaagat gtaccctcaa ggaagaatgt cgcatactt ccgtgaaatg aaagttggtg 420  
attaaatgtc cgtgaaggga cctaaaggtc ctttca 456

<210> 8425  
<211> 364  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-B6

<400> 8425

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atcgtctgtg ttttaggtt tcgggtgtca atgttcttcg tgcgaactc atccagtgtg 180  
tattctttcc gtgttatact ttgtcaagtt cagagagacc tgatgagtct tttccaacgc 240  
ctctttcttg tttgtgagtt atgatgttag ccttcttcag acggataata gactttttca 300  
ataagtttat gaggcttcta tgactaatgt gaggctacgg atgatctaca ggctcaaact 360  
ttaa 364

<210> 8426  
<211> 253  
<212> DNA



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 gatgtctatc ccattcttta cataacaccc actgtaatga tttgtggatc tcacaccagg 240  
 atgggtgcgtc tataatatga gcaacgtctt ggtgagaccc acacatcatc acattgggtg 300  
 ctacgtaagg catgtgatag acttatgcta ctgggggtaa tgcttgcttt caattttggt 360  
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<210> 8429  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-C1

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 aacacattgg aggttggtcc atgttccac gcattgctgg attgtcgggt ggtcgttccc 180  
 gcttctccgg ggttcaggca agaaggattg agcatttaaa acagatttaa tgcttgtctc 240  
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 gatttgata gatagatttg agacaggagc atagaaaggt taggggccga tcacattcac 360  
 ttagttcaaa agattcaaac gagaagacat agctataagt gaatg 405

<210> 8430  
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 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-C12

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 agcccgccgg attcttcgtc agcaccggca ccagggcgcg cgccaggag accactgctt 180  
 ggacggcaat caccagctg gtgcaccacg ggatgctgtt tgttcccatc ggctacacct 240

ttggcttggg catgtttaac atggacgaca tcagaggggg cagcccctat ggagctggag 300  
 ttcttgctgg tgacggtagc aggcagccca gcgaggcgga acttgccctc gccgagcacc 360  
 agggcaagta catggccgcc ttcgtcaaga agctcggcca ggctgattc tgagc 415

<210> 8431  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-C4  
 <400> 8431

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 ggattggtgg tagcttcctt ggacctctgt ttgtgcatac ggctctccag actgaccag 180  
 aagcagcaga atgtgcaaaa ggccgacaac tgagatttct tgcaaatgtt gatccagttg 240  
 atgttgcaag gagcatcaaa gatttagacc ctgcaactac tcttgttgtg gttgtctcaa 300  
 agaccttcac gacagctgaa acaatgttga atgctcgaac tatcaaggag tggattgtct 360  
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<210> 8432  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-C5  
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 actatatgca cttccaccaa caccgacagt agctgcaagt gcaagagtat gggggcatcc 180  
 tgttgcaatt aggttttagca atcttagaga gcctctagta gagtcaccat atatgtgatc 240  
 accatcgtcc atatggagcg caatccatat ggatatgaag atcgtggtgc ctgtgcgcaa 300  
 acacatattc tgcatacgc agtaattttt ttcattttct cattcaaaca ctttgattcc 360  
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<210> 8433  
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 <213> Triticum aestivum  
  
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 tttttttgcg acagacagac agacagcctt gttttttccc caggattttt acattgtttg 240  
 gtctccagcg ccaggatgca cgccattatt ttttcacat gtgtaccatt atttgttgta 300  
 taagaagact gagcacgggt ggacatgttc ataggaggaa taagcacgat gtccatctac 360  
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<210> 8434  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-046-Q1-E1-C7  
  
 <400> 8434

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 gggaagacga ggggcaggaa gaagggcagc aaggccaaga agggcgtgga gacgtacaag 120  
 atctacatct tcaaggcgct caagcagggtg caccgggaca tcggcatctc ctccaaggcc 180  
 atgtccatca tgaactcctt catcaacgac atcttcgaga agctcgccgg ggagtccgcc 240  
 aagctcgccc gctacaacaa gaagcccacc atcacgtccc gggagatccg gacctccgtc 300  
 cgcctcgctc tccccggcga gctcgccaag cagccgtct ctgagggcac caaggccgtc 360  
 accaagttca cctcatccta ggctagtctg ccgtgtccgt gaactgatg 409

<210> 8435  
 <211> 436  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-C8

<400> 8435

cgggtggagc tattagagtc atgctactgg gtagttgtgg attagtagaa atacttgtgt 60  
tgaggtttgt gattcccgtg gcatgcacgt atggtgaaca gttatgtaaa gaagtcggag 120  
catgatttat ttattgattg tcttccttat gagtggcggg cggggatgag cgatgggtctt 180  
ttcctaccaa tctatcccc taggggcatg cgtagtagta ctttgcttcg agggctaata 240  
aacttttgca ataagtatat gagttcttta tgactaatgt gagtccatgg attatacgca 300  
ctctcacctt tccatcattg ctagcctctt cggtagcatg cattgccctt tctcacctcg 360  
agagttgggtg caaacttcgc cggtagcatc aaaccccggtg atacgatact ctctatcaca 420  
cattaacctc aataaa 436

<210> 8436

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-C9

<400> 8436

aagccaagga gtagtctatg cctgatgctt ctgagctctt tacaaatgtc tacgtcaagg 60  
gtttcggcgt tgagtcattt ggccgagata gaaaggagtt gagagctaca ctcccatagg 120  
tcaccaacct gaagatgaag acgagtactc ttctaacacg atgatataatc gaggaggaat 180  
aagcattggt gaacaaacct ttgggtggtg ctggcagtat ttgttgcaaa acgaacctgt 240  
atagagatgt gatgtcaggg gaattcgttc cttatttgtt atgttttctt tttttttctc 300  
ttcctgcaat tcagtttaac tgctgctagc tgccgatttg gcctgcataa tcgcttctgt 360  
tcgc 364

<210> 8437

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-D1

<400> 8437



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 ttatccccatt gtacaattcc attgtataat aaccctaattg tgccaatggt tgccttaagg 120  
 atgttttacia tacatgatgg tttgtgaggt gcatgacaga aacattgggt gtactgcgcg 180  
 atatttaact ttttactgga atgtcaaaag gttctgacac attgtgcaact gtctttctat 240  
 ataaattgga taatttttct aatttttgca gaagttttca cgtaacataa gtatggctaa 300  
 tgtccatatt aatacagact gttctgtttt agacagaatc tgtatttgaa gcatattcta 360  
 cctgttatga ggaaactatc aatttataac actggattaa gccatgaaaa a 411

<210> 8438  
 <211> 415  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-046-Q1-E1-D10  
 <400> 8438

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 cttcggggaa aaccaacgca gtgttcaaga ggtagcagtg atttgctttc ttataactaac 120  
 ggatcttacg agttttctgt tctgaagttt tcaaattttg gttaaagatt cgatggacca 180  
 cggaataagg agtggcaaga gcctaagctt ggggatgccc aaggcacccc aaggtaatat 240  
 tcaaggacat ccaagagcct aagcttgggg aagccccgga aggcacccc tctttcatct 300  
 tcgttcatcg gtaaccttac ttcgagatat atttttattc accacatgat atgtgttttg 360  
 cttggagcat cattttcttt cataggattt gcttgctgat catttagagt aatgt 415

<210> 8439  
 <211> 422  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-046-Q1-E1-D11  
 <400> 8439

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 agtacgacta cctcttcaag attgtgctca tccgggaatc cggggtccgg aagtccaaca 120  
 acctcccctg gctcaaccgg aacgagttcc ggctcgagtc caagtccaac aaccgggtcc 180

aattcccca cccggaccct ccaaaattaa aaggaaaaac tgtaaaggac agttttggac 240  
 acggctgggc aggagagata ccgtgcaatt actagtgcatt attacagggg tgctgttgga 300  
 gcactcctag tctttgacat aacaaagagg cagaccttcg acaatgttca gaggtggctc 360  
 cgtgagctcc gggatcatgc agatgccaac attgttgtca tgatgggtgg gaacaagtca 420  
 ga 422

<210> 8440  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-D12  
 <400> 8440

cggttggtgc taatagagtc atgctagtgg gtagttgtgg attagtagaa atacttgtgt 60  
 tgaggtttgt gattcccgtg gcatgcacgt atggtgaaca gttatgtaa gaagtcggag 120  
 catgatttat ttattgattg tcttccttat gagtggcggg cggggatgag cgatggctct 180  
 ttcctaccaa tctatcccc taggggcatg cgtagtagta ctttgcttcg agggctaata 240  
 aacttttgca ataagtatat gagttcttta tgactaatgt gattccatgg attatacgca 300  
 ctctaccct tccatcattg ctagcctctt cggtagcatg cattgccctt tctcacctcg 360  
 agagttggtg caaacttcgc cggtagcatc aaaccccg 398

<210> 8441  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-D4  
 <400> 8441

gttagtaaaa agatggatca tctattttgg aacggaggga gtaataatga atataaaaac 60  
 taccatttgg acctttgaac aagtgggggt ggagggtccg ggaattttcc aaggtaacca 120  
 ataaccaagg acatgggtccg ccaaaacaaa cctcatcaa attttggtta caggccttta 180  
 ttgagtagat tacaacattg cacatctttt ctgtgtggag ttaactttat agttctgtaa 240  
 tacactagac ttgctctggc taagtttctc ccaatatata tggtagaata gcctactaaa 300

3750

ttttttaagc ttagcacata aattaaagca cagttactgg gtttgtataa ttgtaggcat 360  
ggttaattgt gtggtgtacc tctatTTTTT ggaatttTgt agtggcatac tggcaaccaa 420  
ctgt 424

<210> 8442  
<211> 427  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-D5  
  
<400> 8442

gacgggagat gataacgacg gtgatgctgt acacagtcac catgtagaag atgcaggaca 60  
tgatgatgat gccggcggag cagacgacgc tggaccatcg atgggctggg tgcaggaccc 120  
tcatattcaa gagctgcttc tcaagcagac gaataacgca ggagctgccg cccgagagaa 180  
agccaagatg gatcaacttg agttagacgc ggttactcca ttgtatgaag gatgcaggcc 240  
cgaggatacc cgctgaaag taacgctcat ggctctggag atgaaggtaa aacacaaaat 300  
gaccgacgca tgcttcgacg agaacatgtc attctggcac gaacgtcttc ccaaggggaa 360  
caagtgcccg actagtttgg aggaggcaaa gaaaatcgtg tgcctctgg atttaccgca 420  
cgtaaa 427

<210> 8443  
<211> 383  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-D6  
  
<400> 8443

gacgggtgaa tcaaaaggag atgaaccggt gcaagctgac ccataatcct ctaccgccca 60  
aggtcaagat cattaatcta aggactggct tagcatctgc cacttacaga tactttgtgc 120  
acaaaaacac ttatcctttt gggccatccg gtgccatgtc acacgcgagt ttcagaacat 180  
tgatctgccca atccatcgtg catgttgatt tgcataacac tgtaaaccg ctcgatctga 240  
cgtttgaata tctggcactt atactttatc atatcatcag attacgcaga ccatactttt 300  
catatttctt gcacatactc atctaactg tgccctgtca tatttaccoc aggagggggg 360

atgcgatgta catatttcca tgg

383

<210> 8444  
<211> 341  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-D7  
  
<400> 8444

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gtagcctgcg ctttggttag tattttgttc ggcgctcgag ttcgtattct tcggctgctc 120  
gggccttagt ctgtctgtct gtgagcagat cttggtcagc ttggagctgc tgctgcttct 180  
tttttaggct tcttgcaagt gctgtaagcc tgcgcttgaa gcgctcctgc tctatgggat 240  
cctctggtat gccaaatttg tcgccattga ggtcacctc gtcttcggag ggaggcatat 300  
agttatcatc ctccaagtat ccgtccatcg cctgttcgtc t 341

<210> 8445  
<211> 379  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-D8  
  
<400> 8445

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gaggagaaga aggaggaacc tgagccgcca aaacctgaac agaagaaaga gccaacggtg 120  
atctccgtgg tgcggaacgt gcacatgcac tgcgaggcct gcgcgaggc gataaagaat 180  
aggatcgaaa acatgaatgg agtgcaatct gcatacccgg acctgaacgc gtctgaactg 240  
acggtgaatg gcgtgtttga agagggtcaag ctgactgagt acatgcacaa tcgcaccggc 300  
aggcatgagg ccattatcaa gtccgagccg gttgccccgg ccgagaaggc cggcgaaggc 360  
gacgcatcg atcaaaaaga 379

<210> 8446  
<211> 409  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-D9

<400> 8446

cgggtagggc taagaattaa aggacatgag tgttttgctt tgtgtgattt gggtagctagt 60  
gtttccacga ttccgaaaac tttatgtgat attctaggtt tccatgatct tgatgattgc 120  
tctttaaatt tgcaccttgc ggattccacc attaaaaagc caatgggaag gatcaatgat 180  
gttcccattg ttgtaaatag aaatttgatg cccgtagatt ttatcgttct tgatatagat 240  
tacaatcttt cttgccctat tattcttggt aaacctttcc ttagaacgat tggtaggtatt 300  
attgatatga aggaagggaa tattagattt caatttccac taaagaaagg catggagcac 360  
ttccaagaa agaaagtcaa attaccttat gaatctatca tgcgagcta 409

<210> 8447

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-E1

<400> 8447

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agtagatgat tggtagctag agtgacagaa gcttaaacc tagtttatgc gttgcttcgt 120  
aaggggctga tttgatcca catgtttcat gctatgggta gggttacctt aatacttctt 180  
ttgtagttgc ggatgcttgc aataggggtt aatcataagt gggatgctcg tccaagaaag 240  
gacagtaccc aagcactggt ccaccacat atcaaattat caaagtaatg aacgcgaatc 300  
atatgagcgt gatgaaacct agcttgacga taattcccat gtgtcctcgg gagcggtttc 360  
cttcatataa gaacttgtag aggattgtcc tttgtacaa aaaagattgg gccatcttgc 420  
tgc 423

<210> 8448

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-E2

<400> 8448

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 tgcttccaat ctccggtga ggttgaagaa cgctccatga agtgacagtg caacatgtat 120  
 cggccctaga tatggattgg gtctacgagt gtctgtcaac cttaacgttt gggctagatt 180  
 gtgctgtccg gtttggttac atttttctgt ccaagcagcc tgatacgggg ctctgtttgt 240  
 aggtgctctt agagcaccta caaccggacc ccataccgc ctcaaagtgt cgtgctggct 300  
 gccatatcag tgctcagacg aaaaaagca acccaaccgg gcgtcccgta ttcggtcctaa 360  
 atgcccgac tgactatcaa cccagcatc cagctc 396

<210> 8449  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E3  
 <400> 8449

ttgttcttgt tagaggcagc accaagattc ccaaggtcca gcaactcctc aaggactact 60  
 ttaccggaa aggaccaaac aagggtgtta aacctgatga aggtgttgcc ttccgaactg 120  
 caattcaagg aaacaacctt aaccggcaag gccgttacca aaacaaaggt aacctcctcc 180  
 tccaatttgg gcccttaac ctccggtacc aaaactgttg gaggattcat gacaaacctg 240  
 ttccaagga acactgtcat cccacaaaag aagtcgcagg ttttcaccac ctaccaggac 300  
 cagcagacca ccgtctctat ccaggtcttt gagggggagc gcagcatgac caaggactgc 360  
 cgtcttctcg gcaagttcga cctttctggc attccccag ct 402

<210> 8450  
 <211> 415  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E5  
 <400> 8450

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 gtagagatt tatcatgtaa tcgaattagt tttgttaggg tttgatccct agtatccact 120  
 atcttctgag attgatgttg ctatgacttt gctatgctta atgcttgtca ctagggcccg 180

agtgccatga ttccagatct gaacctatta tgttttcatc aatatatgag agttcttgat 240  
 cctatcttgc aagtctatag tcacctatta tgtgttatga tccgttaacc cccaaagtga 300  
 caataatcgg gatacttacc ggtgatgacc atagtttgag gagttcatgt attcactatg 360  
 tgctaattgct ttgttccggg actctattaa aaggaggcct taatatccca taatt 415

<210> 8451  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E6  
 <400> 8451

gggtcgacgg ggtatgggat caacacctat gttttctttg ggtcaaagtt accgtgggtg 60  
 ttgtgcataa gttatcacac ccgtgggtg tatttcacct tgccatttag acaaaagtta 120  
 attgcgggat attttcaaca actttttcct aagtcaaaag ttagcacggg gtttgtatgt 180  
 gagttatcaa ctttgtgggt tgtaaaatat catggatatt acatagaggt taccagggat 240  
 atgttttcaa caacaaacaa tcccgggtca aaagttttca cagtgtttgt gagtgtgtta 300  
 tcagctttgt ggtgtattac catgatattt acacataaac taccgaaggt atgttttcaa 360  
 cgattttttt cagtatgctc ctctctctta tatttaggaa caggggggtg acaaaacaga 420  
 agcaacg 427

<210> 8452  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E7  
 <400> 8452

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 gctggagggtg atcaccaacg ggcggtacga gagcgtgatg caccgcgtgc tcaccgcca 120  
 cgacggcaac cgcatgtcca tcgectcctt ctacaacccc ggcgcgacg ccgtcatatt 180  
 cccggccccg gcgctcgtgg gcgctgccga cgctgctgag aggaacgagg gcgaggagg 240  
 caccgcgcta tacccaaggt tcgtgttcga ggactacatg aacctgtacg tgcgccacaa 300

gttcgaggcc aaggagccac ggttcaaggc catgaaggca gacgccgcgc ccatcgccac 360  
 cgcgtgataa ctgatacgcg cccggacccg gacgagagta ttgtgagacg tgttttaatt 420  
 tc 422

<210> 8453  
 <211> 170  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-E8  
 <400> 8453

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 atctgcaagt tatcacgtgc tggccgtact acagtgtgat ttacacgtgt tctaactgct 120  
 gtattgtatc atcatgttca tcgtctcttt ctacatgccca ggcgcttact 170

<210> 8454  
 <211> 412  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-F1  
 <400> 8454

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 atccccaggg agggatgacg atcccatttg gaggggaaaa gccactccc gaaagatgggt 120  
 catggattga tccatctgtc ttcaagctaa ggagtgaac attcctcaga gataagaaga 180  
 aatgtccagc tccgaactat gccgcgtact acccaatagg tgttgacttg tttgcaagcc 240  
 ccaagaaggt ttgcacatc gccgaacaca ttgatcttcc acaagtcaaa tcacacgaca 300  
 agctcccatc acttttgatc gtcaacatcc agatgcctac ctatcctgct gctatgttcc 360  
 tcggggacag cgatggagaa gggttcagcc tttgtttgta cttcaaaatc tc 412

<210> 8455  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-F10



<400> 8455

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 acctaacata aactcaggat gtaacaatgt agaaaatagc tgggtgaaaa acaacttatt 120  
 ctgctccctc ggtgttgaat aggggtgcata ggggtactaaa tttgccccaa gttttgttca 180  
 accgaggaaa gtgggacttg ttagttctca caattgagca agttttctaa tactccctct 240  
 gttccatatt agttgtagtt gatttagtac aaagtttata ctaaatacagc gacaactaat 300  
 tatgaatgga ggggtaatat gtttttgcac accgaaggac gttcctaaca taaagttttc 360  
 taatataaag atgttccgaa tttaaaacta tccatgaatt ttgaaaactg ttcatttttt 420

<210> 8456

<211> 346

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-F2

<400> 8456

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 gccttccgtt ccaaggcaat gggcctgaat tcggaggcgc tcgcaaaggc ttccttggac 120  
 atggacaaaa aggtggtggt caacttctac ccgcggtgcc ccaagccgga cctcaccctg 180  
 ggtctcaagc gtcacaccga ccccggcacc atcaccctcc tectccagga cctcgctggc 240  
 ggcctccagg ccaccgcga cggcggaag acctggatca ccgtccagcc catctccggc 300  
 gcattogtcg tcaacctcgg cgaccacggc cacttctga gcaatg 346

<210> 8457

<211> 403

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-046-Q1-E1-F3

<400> 8457

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 tggagctgtg aatggtgctg tgcctatttt gggtgaccat gctgatgtgg agagcgagaa 120  
 tcctgagaac actgtagtgc ctgagcaggt ggatgagtat gtagatattg atgacgagat 180

gccaacccgca acttaccgat cagtggagat cgagaagggc gctgaggcca cgagtgtctc 240  
 tgggtggttcg ggaagtgggtt cttcatcatc cagtgggttca gggtcaggga gctcagggga 300  
 cagcgcctca gaagctggcg atgctcgttc tcttgtttag aggaggttgt tctaacagta 360  
 ggatttgagt angtgaggga tgtgagtact taattctggg atg 403

<210> 8458  
 <211> 168  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-F4

<400> 8458

atggtcaact taagtgtga gtagaacaat ttaaagttg gaaaagatt taacttcccg 60  
 aataaatgcc ccctggcct caattcgggg cttttccccg gggaaaacaa ttacgttaat 120  
 gacttacggt ttaacaaaaa cttccccggg aaattcaaga tttctcca 168

<210> 8459  
 <211> 354  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-F7

<400> 8459

cgggtcgacg ggcaaacaca tactcagagg atataagtga agcacatgag taaatgacaa 60  
 actactccaa aacgatatag gtgaagatca atgagtagtt aaataattat gtaactacgt 120  
 gaagactctc tctcattacc gaatttcaga tcttggtatt gtattcacac agcaggcaaa 180  
 gaaaacaaa atggcattgc acggatagca caacacatgt gaagaagcag aaacttaggt 240  
 tcaaccgata ctaatcgata gttgttgaag aagaaggtg ggacgcctag cggggcatcc 300  
 cgatgcctta gatgcttgag acttcttgaa ctactgtcat ggggtgcctt gggc 354

<210> 8460  
 <211> 362  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-F8

<400> 8460

acggggaaat tgcgtgtcta agatgacggt tgagctgctg acgctggggt ctacctctgc 60  
 ggaagatgtg caactcatga tggttgtcat gaactcgcac ggagattgca tcaaccatgt 120  
 caacagttca actccttctg catagccaac ttcggggtca tgatagacgt cgccaaggac 180  
 ttcagaatca tctcaattca ccgcattctt cagatccagg agcagatgaa tctagatagc 240  
 gctacgtgaa acatattcag tcaccgacct agccagggtc cgatgcattc tcagcttcag 300  
 ctggacgcag gcccaaactc tgtgtgagta ctctatttgc aaccaatagt catcaatgat 360  
 ga 362

<210> 8461

<211> 388

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-046-Q1-E1-G1

<400> 8461

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 gattgaacaa attaggaaaa ggtgattggc gtggcatatc ccgtaattat gttgtctcga 120  
 ggacacctac tcaagttgct agccatgctc agaagtattt cattcgccaa acaaatgtta 180  
 ataggagaaa gagaagatca agcctcttcg atatggttat tgaggatcct ggtgaccagc 240  
 cactctcccg ttcacgtgca caagagatgc cgctctcccg ttcattctca caagatgtag 300  
 aagagttcgt agatgatcta cggcctgtta ctgctcctgt gacnacaccg gtcctatgc 360  
 ccgtgataac atctgtttct gtccacca 388

<210> 8462

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-G10

<400> 8462

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agggtttctc aagttactcc tgccccccct ttttgaata gaactccaat ggttatgttc 120  
 tcccaatcca tgaaatctga gtaagtttcg ttagatccgt gtagtgtatt gatgttttga 180  
 atggtacagg tgataagaga ttagttgttt catatgtgca aatgatttct tctagtaatt 240  
 cgactagggc cagtgttcgt gctaataatt cctagccagg gcttgacaat tgattttgaa 300  
 tgacctaaat atgtttgtgc cattattttc ttcaagattg gtctatacat agacgactgt 360  
 gcttaaaaat agaaccataa tatctggata tgtataaata aaagccataa attcctaata 420  
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<210> 8463  
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 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-G2  
 <400> 8463

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 ccaagtttac cttcatgcat gcacggtgtg gtgtgcccgt ttccttcaac ttttgtacaa 180  
 aatcatgcat cagggcgtag ataccgtatg gcatacatat atacatagag cgagaaatat 240  
 agtagagagc ttcgtggtac attattggtt ttattacggc actcatctct ggtttgctgg 300  
 tgtatggact caggaggagg 320

<210> 8464  
 <211> 326  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-046-Q1-E1-G4  
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 taacctgggc ccgccccacc accaaggcaa ctcttggaac ccgggccaat aaaacggctt 120  
 tggcccaaat ttggaataag caaccccccg gtccggaacc cttggaccaa atccgggaaa 180  
 ttggcgcaat caaccaattc aaagccaaca tcgtgtacct tgctgcggc gacaaaattc 240

ttggcgctcga tgtggttact aagaagataa ctaggatttc tggcttagct atagctgtgc 300  
cagatctccc cctactacca tgtgtg 326

<210> 8465  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-G5  
  
<400> 8465

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acaacaacaa gatcaactgg gcaatgaaag acaagcaaga gtttgttgac attgtggaga 120  
ccgtctacag aggagctcgt aagagccgtg gtctggtgat tgctccaag gattactcca 180  
ccaagtaccg ttactgaggt atctgtgcct ggetattcat gtgcagtgtg tggcctgctc 240  
tgttctgtga aatgagctgt gtgacccttg atgtaatgtc tgtcaacttt gaaagtgtcg 300  
cgtaactatg tatttgtatc ttaaatacat gtcataaacc tgtaaccctt tgaaacagga 360  
cctgctgtct attggtatta ctgattaaag tgatatttgg ttg 404

<210> 8466  
<211> 396  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-G8  
  
<400> 8466

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gccccgcgca gtgcgcctac gaaggtggag tcttcaagct tgaacttttc ttacccgagg 120  
aatatccgat ggctgtcct aaagttaggt ttctcacaga aatataccat cccaacattg 180  
acaagcttgg tagaatatgc ctgcacatcc taaaggacaa gtggagtcca gctcttcaga 240  
tacgactgt tcttcttagc attcaggcac tgctgagcgc cccaaacca gatgatcccc 300  
tctcagaaaa cgtcgcaaaa cactggaaat ccaatgaagc tgaagctgtt gagacagcga 360  
acgaatggac tcgtaagtat gccaatggtg catgac 396

<210> 8467

<211> 384  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-046-Q1-E1-H1  
  
 <400> 8467

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tgctgttggc aatggacata cttgtgatag caatcaccct catatgcctc tcatgcctac 180
cgggaaagat ccgggaaagt ctctttcttg ggtagacacg agcttgtccc tcgtcgagac 240
ggttacgacc ggcggggcag ggggaggtat gatgagtggg ggttgtgtct gatggatgtg 300
agatattatc cttgagctaa tcatgcagga aataacttaag cctcctgagt cggccgtaga 360
tcgaatectg ttccagtaac cccc 384
  
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<210> 8468  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-046-Q1-E1-H10  
  
 <400> 8468

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tacttgataa ttgttttgag atatggagat ggtgatatta gagtcatgct agttgagtag 180
ttgtgaattt gagagatact tgtgttgaag tttgtgattc ctgtagcatg cacgtatggg 240
gaaccgttat gtgatgaagt cggagcatga tttatttatt gattgccttc cttatgagtg 300
gcggtcgggg acgagcaatg gtcttttctt accaatctat ccccttagga gcatgcgcgt 360
agtactttgt ttcgataact aaaagatttt tgcaataagt atgtgagttc tttatgacta 420
at 422
  
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<210> 8469  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
<223> Clone ID: LIB104-046-Q1-E1-H11

<400> 8469

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tatcattaat gtggggcgga gacggatgga cggacggtag ttctgtcatt tgaaggcgga 120  
gcaatcacct gcactangaa gcgcgacggg cgacgctgac cgtttcgggc ggaaagcacg 180  
cacaagcgag ggaggaggtc tgggtgggcc agggcagtc gactcgtgct tggcaacggg 240  
tcgggtccagc agccggacat gctggctcgc cagcaagctc gcctagctga gcgacgacaa 300  
tcagatgatg gacgtagctt ccaaccagga gccggcgcca ctgtccaagc cggttcatgc 360  
catgttcacc atagagcaag tgcggctgca cttcgacgcc ct 402

<210> 8470  
<211> 399  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-H12

<400> 8470

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ggtgaggcct ctgcggcagc acagccggcc ataggaggca ggagcatgcg gcacgaccaa 180  
cgctgctttg ggcggtgga gcaagaagac caagaagcac tacggccatt ggatggacat 240  
cgtacgggtca ctggagctag aatcgttcat attgactaag ttgacaaagc cctccgtctc 300  
cgtcaactta gtagggccac aagtcagcct cccaccatgc tgggtcccag ctagcagggg 360  
ggtattcatt tttttgtgcg taataaggag gcacttcct 399

<210> 8471  
<211> 383  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-H3

<400> 8471

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 attactatta tcttaatctt agtgcagtgt tatgtaatat gcacatgaa ttggtagtgc 180  
 agtgcagtgc agcacagcac atctctgaac ctgggaaggt actactagct ttcttttcac 240  
 tcagacaagt cgggagggg tttcttgta gttagtccgt ttctggcttg tcagttagctg 300  
 tgggtgcgtgt cgtgtggatc gagttagtgt tactaccaga aattcggaat gacatggaac 360  
 ccatgcatag catagccgat gac 383

<210> 8472  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-H4

<400> 8472

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 tcccttcggt aaactaccac tgacctgcaa gccattaaat accgtttgtg atgacaaagt 180  
 cattactaac cctgatgggt cattcgcgca tcagtgatga tacaatttgg ccgatcagtg 240  
 ctattcgggt ctgcagttagt ggtaaacaag ctaggattag atataaccga atatacatgg 300  
 agacgaagat gtatcccgat gttctcttcc ttggaggaga actagtcacc gctagagagg 360  
 tgggaattca tggatacggg ccaaatatgt 390

<210> 8473  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-046-Q1-E1-H6

<400> 8473

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 acatggtgct cgacatggac aaagtgtgtt ctgccgcact tctgcacggg tttcgccccg 180  
 ttgctgagggc ttgatcgtct ggttgcaagt cgagtgaata agcgttacgc agataaggtc 240



atatgctcgc tgaagggcca tgctgaggaa gaagaagcag acttattggc tagcagatga 300  
gtggcctata attaattaag tactactact agtttgatct actactacca aggttacttg 360  
gttagctatt actactgcat tattcatctc ctacgataat gaggtaatga 410

<210> 8474  
<211> 418  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-046-Q1-E1-H9  
  
<400> 8474

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atcatcagcc ccatcatcag ctatcaactt catcgtaag gatctcagac cctgaggctc 120  
actcaattaa cgattgcggg cggttctaac ctttactctg aatgcgatgc ctggtgcgaa 180  
atctacctat atgtgctggc tttactctca aagctatttg gtctatcaca gtaactaaat 240  
caacactaat gtgtacggca gcgttgata gattctcgct cagatctaac acaatcatga 300  
aactgaatca tatttgctct tgaacttttt gtcacccatc gtttgcataa acatatgtat 360  
acttttcaat ttgtacttgt ccggacaagc ggcaaccgtg ccgcccgcca tgcaaate 418

<210> 8475  
<211> 400  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-A11  
  
<400> 8475

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cttgagagct cgagcgaggg gagtgagatc gagcggggta aatgcagtct gaggaggggtg 120  
aggggtatatt aaagccgagg tgaaaaaccg ctgcgccaag gaaaatggac gaacgtgccc 180  
ctgacccttc tcatcctagc gacatgtggc acccagctac agtgtggtgc aaatcgtgtg 240  
agatcggtgg tgactagata actcttatcg tgggatgtgg gacattttga gcggcaaaag 300  
ccgaaaattc ggataagaat attttaatgt ttcgtttctca aattcttcag ctgacaagga 360  
tacagtgatg attttgaacg agtttcaaat agaacgcaca 400

<210> 8476  
 <211> 357  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-047-Q1-E1-A4

<400> 8476

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 aggaggaaaa ataaaaggaa gaacgcagga ttttgaccaa caatcagtaa ggggttgaca 180  
 cgtgtcgcaa aaataaaagg aggaaaaatc tgggactgac caacaatcag tccacagatt 240  
 ttgttttcag tttagggtoga attttttgcc caataagggg ttgacacgtg tcgctgatat 300  
 ttgagctgct gtatgcaaca aattcgacgg attcgttcga aagttgcctg gacggcc 357

<210> 8477  
 <211> 285  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-047-Q1-E1-A5

<400> 8477

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 tacgtgcagg gacagggtgt aattttcttg ttagatgcat gctcagatgc atctatcctg 180  
 cagaccagtc ttcttcttct tttctttcct tggaaaacct tttgtggcgt gatttggtta 240  
 agccttaggt ctgccaatca atttagcaag aataagttta tgttc 285

<210> 8478  
 <211> 257  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-047-Q1-E1-A6

<400> 8478

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gcatggacag ggtgttattt tcttgtaga tggatgctca gatgcatcta tctgcagag 180  
gaatcttctt ctttctttca ttctttggga taccttttgt ggcgtgattt atttaggctt 240  
caggctctgcc agtcaat 257

<210> 8479  
<211> 391  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-A7  
  
<400> 8479

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taaatttttg ccaattttcc ccaatccctt gccagaaacc ctcataactg ggcacaacga 180  
acattgccgt cgggtcatag gcttgaccgt taactctgac tagtggggcc acgctggact 240  
gtgttgccg ttcaacctga caagtggggc tgcgctgggt ggtgtcgctg tttgaccgtt 300  
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aagcctgcta tgcattgcacc cagcaaacc t 391

<210> 8480  
<211> 380  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-A9  
  
<400> 8480

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gcatgcgat ggctgaccca attcgggtcaa tctcctaaca caatcgtttc gtttcgtttc 180  
gtttccgtga acctcaatca gcagaccctg tgctggcgcc ggtagtatgt aatgtgtaat 240  
cgtcgtgtat agcgagacga cgcaccgccg atcgatogat cgtggtcgag tcgttgcgtc 300

agtgactatg tgcattgtgt ttaacatggg agcgacctgt tgctgtcgcc gactaatcat 360  
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<210> 8481  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-B1  
  
<400> 8481

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acttatcctt gaatttttcc cagggtgactt cctcattaat cggccacatg gcttttgtat 180  
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ttccttcagt acgggagcgc tcaagctttt tctccatggg gcgcaaccaa tcgtctgcat 300  
ccaatgggtc agcaacctga ctgaaattgg gtggattggg cctctgaaaa tctgacagct 360  
ttgagtgatg accattctga tttccatttt gtccaact 398

<210> 8482  
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<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
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atcaaccaga actgtcaaat gtgaggttga aggcttgtca tgcctcgcca cattagcacc 180  
tggcagatca gaaggtttat tcgtgctttg attctggtaa gcacgatggg aggaaccaat 240  
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atcttttatg ctagtattag caggcctact agcancagat gtgccagtac tgaatacagg 360  
aggctccaaa gaaacggctg atcacaaatc tgtggtgtgc tgaaaatat 409

<210> 8483  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-B2

<400> 8483

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 gaagctgtgc tgcaagtatc tgattgggggt ttcagcttgt cagatattca aatgcagaag 180  
 aaagaggatc agggagtatt tgaatttatg aagtctctgt tcagtcaggc tgaacgagag 240  
 tgggcgggat ttctgggccc aatccacatt tggcaggaa tggatgaccg ggtgggtgcc 300  
 ccgtcggatga ccgagtttgc caggaggatg gttccaggag ccactgtcca caagcttctc 360  
 gacgaaggcc acttctcata cttctgtttc tgcgac 396

<210> 8484  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-B3

<400> 8484

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 ctcttgtgcc ggcgaacttc accggtacca tacaccacc atatatcttc ctcaaaacag 180  
 ccaccatacc tacctatcat ggcatttcca tagccattcc gagatatatt gccatgcaac 240  
 tttccaccgt tccattcata tgacatacat tacttttgtc atattgcttt ttgcatgaac 300  
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 tgattcattg catatcccgg tacaccgccg gaggcattca ta 402

<210> 8485  
 <211> 408  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-B4

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 aggaccacca ggacgagatc tgcgagggtg tgetgaccaa gagccccgac gcgtcgtgcg 180  
 ccgagatcga ggagtccgc gaccgcgcgc gcgtcccgt caccagcaac aacggcatga 240  
 agcagcaggg caccgccttc gccaaaccca tcgccttctt cccaaggag ccgcgcaagg 300  
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 ccatcccatc catatagtct cgctcagttg cttcccatca tcatcatc 408

<210> 8486  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-B5

<400> 8486  
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaaaaaa agaaaaaaaa aaaaaataaa 120  
 aaaaagaaaa aaatgaaaaa aaaaagagga aagttaaaaa aataaaaaata aaaaaagggy 180  
 ggcgtttcaa ggggttcaag ttttatttcc gggttatggg aattttaaac ctttttaaag 240  
 ggtcccaaaa ttttaattta aggggggttt ttttaaaagg ttgtatgggy gaaaaccctg 300  
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 aagggggccg aaagggttgc cctttccaag attttgccaa cc 402

<210> 8487  
 <211> 336  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-C1

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aggacggcga ccacaaggag aagaaggaca agaagaagaa gaaggacaag aagcacggcg 180  
 agggccacaa ggacgacgac ggccacggca gcagcagcag cgacagcgac agcgactgac 240  
 ccagctccgg cccgcgctcc ggaaccgttg cagtgtaggc aaaatcaatg atgaacactt 300  
 ggaaaaagtg tgacagacat atatgttgca gggttt 336

<210> 8488  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-C6  
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 acggtcacgg cttcctatgg tcgtatcctt cctggtcgtc ttggagtcct cgcttcggcc 180  
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 tcgtcgcttg ggtggtcttt tcagtcccc gccatcttca tgggtgtgtg attgagtgtg 300  
 gtggtggagt gcgtttgtat cttcttactc gaatgttgtg gtgatgggtg ctttatatat 360  
 aaagcagggg accccttttt cgccaaaaaa aaaaaaaaaa gctaaaaaaa gaaaaagc 418

<210> 8489  
 <211> 77  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-C7  
 <400> 8489

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<210> 8490  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-C8

<400> 8490

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 gggatgccag ctctcctgcg ccaggacttc ctgccaccgt cttgatccag gtaatcagat 120  
 tggcacagtt catgtgcgcc atgaattagt aatgcgcaac cactgcactc acgtatgatg 180  
 agccgacaac gacgatgtgg tggtaaaactc tttttgcaga ccgcgaggcc gctgaggcct 240  
 gcttcggggca gtgctatgac ggctgcaaga ccaagactcc ctgccgaggc ctctccgcgc 300  
 cggcgccggg atgcccacca cgttaggccc ggtggtcgcc gaccttcctt catccgagcc 360  
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<210> 8491

<211> 390

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-D3

<400> 8491

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 gccttcttga acttagtggg aacaacgcca ttattgtcat ggatgatgca gacattccgc 180  
 tagctgtgcy ttctgttctg tttgctgctg ttggcacagc aggacagcga tgcactacat 240  
 gtcgtaggct gcttcttcac gaaagcatac atcaaacatt tcttgatcaa cttgttgagg 300  
 tttataaaca agtccgtatt ggggatccta tggaaaaggg accttgctgg accaaccgca 360  
 actactacat caaaaggaaa gctttttgaa 390

<210> 8492

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-D4

<400> 8492

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gactttttta aaaataaaaa ataattccac ttagaaaaac aaagaaaaga aataactaaac 180  
ggactccaaa aatcctgaaa taaattttcc ccttcctcta aaaatctaac ggacaagggtg 240  
aacattttatt tgggcctcta atgcaaattt tgaaaaacgc atattattcc taattcaaatt 300  
aaaatagcga taaaaactcc gaataaaatc ttatttgatt ttaatattaa atctccaata 360  
tttcttgact ttggggaagt cattttatcc cctccctttt aatttcaaaa a 411

<210> 8493  
<211> 417  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-D7

<400> 8493

gagaggaaaa aaatattttt cttaaatgaa tctagtcaaa ccaaaatatt gatttaaccc 60  
gaatcggatg atttttggag tctgtattta ttggtggaaa agaggcttag agtcaaaggc 120  
taggcaatgt gggactaaac gtagacaaaa atatatgaaa cagagaagaa aagaggcgga 180  
tgggcctaaa ggccttcggc ccgccgcgcg cacgctgcag ctgcagtttt ttttaaaaaa 240  
aattcggcct aaaaatgaaa aggctggcta ggcctggctc atttaagaga ggaaaaaac 300  
aatggggcgc cagaagctac tatactgcgc atgtaggcga caaataaata tgggccgcac 360  
gtacattttt ttaaatagaa acagaaggaa aaccgaatag caaagattaa ataaaaa 417

<210> 8494  
<211> 378  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-E3

<400> 8494

cggggtgaca aattgtaaat aaaattgttg tatcgcgacc tgaatgaatg aaataaacga 60  
aataacgctc ttgttcaacc gtcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggggc ccacaaaaga ttaaaactaa 240  
atatccggga aaaggaaatt aaaaaccctt aaaaagggga cacaaaatta aattaaagg 300

gcgactttta aaaaaattca aacgggaaaa acccgggggt aaacaaaata aaaccctta 360  
 aaaaaaacc ctttttcc 378

<210> 8495  
 <211> 361  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-E4  
 <400> 8495

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 atggatggtt catcaagggt agctatatatt gtagggcttg ttatacagag actgtattac 120  
 cactgccaga atacactagt tagcaggtac accagttcca gctgagctgc tgagcaaagc 180  
 tcatcatact actatacatt ttcttcatct acaggggttg ttcattgggtg atgggctgac 240  
 atgttggttg tgggcattct tgtacttttt ttttgacca gattctttga tgtatttttt 300  
 caaaaaaaaa aaaaaaacca aaaaaaaaaa aaaaaacaat aaaaggaaaa aaaacacaaa 360  
 a 361

<210> 8496  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-F10  
 <400> 8496

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 gacggtgtta ctggcaatga atttatagga ttttttccct cttcaccttt gagttagtaa 120  
 cttttctccc caaaaaaaaa aaaaaagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaggag caaaacaaaa ggaataaaag ctaacaacaa 240  
 aataaaagca acgtcaaagt ccctgaaacg tagtcaacca aattcaattc atcgagaagt 300  
 cgtaaagaa aatacagaga ggtaaaaccc tgtagtcacc cagtataaca gcattgtaac 360  
 aaaacccggt gtcaaaagca agaggaatac ccaaaaggcc cgtaccaata gcggtgcaca 420  
 agaattgggc a 431

<210> 8497  
 <211> 418  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-047-Q1-E1-F2  
  
 <400> 8497

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 cattgtgaac aagttcttga agggagaggt tggcccaaaa accgtccatg ttccatcagg 120  
 ggagaagctt gctgtttttg atgctgctat gaaatacaag aatgaagggc atgacactat 180  
 catcctggct ggtgctgagt atggcagtgg aagctcaagg gattgggctg caaaggggtcc 240  
 aatgcttcag ggagtgaagg ccgtgatagc caagagtttt gagaggattc accgtagcaa 300  
 tcttgctgga atgggcatcg tccctctatg cttcaaggct ggggaggatg ccgacagtct 360  
 tggcttaact ggccatgagc gttacacat ccagcttccg actgatgtga atgaaatc 418

<210> 8498  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-047-Q1-E1-F4  
  
 <400> 8498

gacgggaagc caaaatgatg taaaatagac ccgtggccat aggttttact agtggcttct 60  
 ctcaagatag catatattat ggtgggtgaa caaattactg ccgagcaatt gatagaaaag 120  
 cgcatagtta tgatgatatc taggcatgat catgaacata ggcatcacgt ccgtgtcaag 180  
 tagaccgaaa cgattctgca tctactacta ttactccaca catcgaccac tatccagcat 240  
 gcatctagag tattaagttc ataagaacat agtaacgcat taggcaagat gacaggatgt 300  
 agagggataa actcaagcaa tatgatctaa aacccatctt tttatcctcg atggcaacaa 360  
 tacaatatgt gccttgctgc ccctgctgtc ac 392

<210> 8499  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-G2

<400> 8499

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acctccaccg gcacagaagt cgtgatgatc gatgtctccc caagctcagg ttggatggcc 120  
accgtccgcg gccgatgcct tgccctttcc cttggaacag gttgtcatgt ggcgactgg 180  
aagcaccat tcacagtga actcctccaa ggctgcgagg agcaaggaca tgggtgcattg 240  
atcgcatgt tgtagaagg taaaccaacy cactcacgcc agagccgaga caccatacct 300  
gcatgcatgt tggtgtgctg tgggtgtgca tgtactccct ttgtaccgaa atatttctag 360  
ttgaaaagtt atcacgtaaa atgtaaccgt ttttaaggaa agaaaaa 407

<210> 8500

<211> 371

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-047-Q1-E1-G4

<400> 8500

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tcggccattc ttgctgcaan aagccctttc tttttcaagc ttttctcaa cgcatgaaa 120  
gagtctgaca agggacaggc aacacttcga atagctgatt cagaggaaaa tgccttcatg 180  
gagcttttgt actttatgta tagtggaag ttgacaccaa caactgagcc cactcatctg 240  
gttgatatct tgatggctgc tgacaaattt gaggtcattt cttgcattaa gctttgcggt 300  
cagttgctca caagcttgcc tatgacccca gaatctgcag tgctgtgcct agatctacca 360  
tattccattt c 371

<210> 8501

<211> 320

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-H1

<400> 8501

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 cgatgagata agaggagggc tcagaattgc ctgccaccag tgtgcgtgcc gtccagaaga 120  
 agcggcctgc atcaatggct ctgcagttgt tctacgtact agtacttctt tgttcgaaag 180  
 aaacacaatt ctgtagttga tcgtggcaaa attctttgac atggatccac caacggggca 240  
 tccatctgaa cttttgttgc agcatcagta tgtgcactgt ttaacccgca aaaaaagca 300  
 tgtgctatgt ttttttggcg 320

<210> 8502  
 <211> 333  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-047-Q1-E1-H12  
 <400> 8502

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 cgtttattaa tctaggtcca tggttgatgt gtgaatactg ttgccatcgg ggtacatggg 120  
 ggtagcccga cggccatgat aagccgacgg ccacggctag gctatcgccg tatttggcgg 180  
 ttggagcacg aagaccatca agcactacgg ccattggatg gacatcgtag ggtcactgga 240  
 gctagaatcg ttcattattga ctaagttgac aaagccctcc gtctccgtca acttagtagg 300  
 cccacaagtc agcctcncag catgctgggt etc 333

<210> 8503  
 <211> 393  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-047-Q1-E1-H2  
 <400> 8503

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 gtcaaaagat gattctgggc tgtctccaaa catcacagaa aggttaattgt gttgggaaac 120  
 tgatgatgcg catgccagga cgtgcgtatt gtacaacttg atgtaccaat gcattggtag 180  
 ggtaagacgg cttttgccat gtcgggtgcg ctcgcttggc aagccacaag tcaataaaaa 240  
 gtatatattg tggtgtttgc ggggtggaga tcgcacggga acaatctatt tgttctattt 300

tgccccgggtt ctccaccctg ccatgggtgc tctgtccttc tctgtgttg ttgattccac 360  
cgcatcatct gaagtacacc gcgatcctac ata 393

<210> 8504  
<211> 376  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-H4  
  
<400> 8504

ggcgaccgag gcgatggact gctgaggggt ctgccttggg gaaattacgg gtgcaacgtc 60  
gtgtccaatt gctgggccta aagtccaatc ctttaaagggt tcgagttccg ggccaaaatt 120  
tgtaagccgg cggcgcaaca acaccattgc cccgggcata tacaacaacg gcaccgaatc 180  
cgtatccata taccaccacc aatccgtgtc catataccac caccgatcca tatccatata 240  
ctaccaaccc caacagcccc cacaacctca actgcagctg catcctcaag cacagcagcc 300  
tcaacaaccc caatcgcaac tgcattcatc tcaatcacag cagcccctgc atcctcaact 360  
gcaaccgtat actcag 376

<210> 8505  
<211> 412  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-047-Q1-E1-H6  
  
<400> 8505

ggccgacggg tgtacccagc ggaggecatc tatgccaacg ctgggggtcta cctcttcaac 60  
aacgccacca gcgccgggt caacgtcacg aggtctgtcg tccacgagat ggactcctcc 120  
tacaatcagg cctacatgac ctactgttaa aaagaaaatg caaatattat ttttgtttag 180  
taaaaatatg atagatagca cattgtatgt actgttttta gaccaaggaa ggtcgtctca 240  
tttcttcgtt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa 360  
aaaaaaaaaa aaaaaaaaaa aataatataa cataaaaaaa aaaaaagggg gc 412

<210> 8506  
 <211> 392  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-047-Q1-E1-H8

<400> 8506

ggcgaccgaa gcgatggcct gccgggcggt cggcggcggc gagagcaagc tcaaggcgga 60  
 ggcgacgacg gacaacaagg ggtggtacaa gatcgagatc gatcaggacc accaggacga 120  
 gatctgcgag gtggtgctga ccaagagccc cgacgcgtcg tgcgccgaga tcgaggagtt 180  
 ccgcgaccgc gcgcgcgtcc cgctcaccag caacaacggc atgaagcagc agggcaccgc 240  
 cttcgccaac cccatcgctt tcttcccca ggagccgcgc aaggagtgcg gcggcctcct 300  
 ccaggcttac gacctcaagg acgcaccgga gaacccatga acccccatcc catccatata 360  
 gtctcgtca gttgcttccc atcatcatca tc 392

<210> 8507  
 <211> 354  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-A11

<400> 8507

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 tgatttcctt ttcttgcat aggtcaaagc tgctgcattg atgctaggag cattattaga 180  
 tgaattctca tgatccacta acagcgcttc tgcgacggtc gcgagcaaat caaacgggga 240  
 catctcatct ttctttctcc tggctgagcg tttccctga atcatcaccg ggcgttaata 300  
 cataatatcc agcacgaaaa ttgcgcgggg tcatggcagg tagtacagga tatic 354

<210> 8508  
 <211> 120  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-A2

<400> 8508

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ctttaacagc tccatgcctg cataggaggt tgcacagct gactgacgtt atccaccaca 120

<210> 8509  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-A5  
  
<400> 8509

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gggttttcac ctcatgtatc ctctcccact tacccttcg tggcttagac tttaaataga 120  
ccacctccac cttctttcta ggggaagcaa atatgatagc tcattcttag gtgagctttg 180  
ctcctacctc tacctaagag gcaaggctct atacactaga atagttttga tgtgtcccg 240  
caactcacag aacgaggaga agctttctta gtatgccgtc tcccccgcca acgggcacgg 300  
tggcttgag gatgaggatg agcttgctta ctagtacgcc ttatgccgc tccctggccc 360  
aagcgcgtgg ttgatcacag gacaaggaga aaattttact actccgtcgt ttactcctca 420  
acc 423

<210> 8510  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-A7  
  
<400> 8510

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agcctgctaa cgatggggaa aaagaaagtg ctgcgcataa gaaggggaaa gataatgagg 120  
agggtaataa ttctgataaa ggtgaggaga atgaagaaga ggaagccgct cgtaaagata 180  
ggctcgggct ctctaaaagg ggcattgatg acgatgagga aggtggaaaa gatctagatt 240  
ttgatttggg tgatgacatt gagaaagggt atgactggga acatgaagaa acattcaccg 300  
atgatgacga ggctgtggat attgaccagc aggagcgggc agatttagct cctgaaattc 360  
ctgctccacc tgaaattaag caggatgatg aagagaatga ggaagaagggt ggctgagca 420



agtc

424

<210> 8511  
<211> 417  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-048-Q1-E1-B1  
  
<400> 8511

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ccgggccttc agaagcagcg ctaccagat ctgaccaagg ccgacgaggt ctgctttgaa 120  
acctgctaca aggagctgac caatggcggg gagaaactcg acaatttggt cagagcaaaa 180  
gagggctccg acgatatcgg catggcccag ctccccgaaa tccgtagctt catcaaggag 240  
aacaacgggt cgcattgcca gtggaattgc gataggtgtc gccctgcaaa tgacaagaag 300  
acacccgatg atgtctccaa gaagaacgat gctgagaagg ccatggctgt cctgnagggt 360  
cttgtcaaca aagtgaccaa ataaagaaaa acaaaccctc attgcatact actagct 417

<210> 8512  
<211> 412  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-B10  
  
<400> 8512

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tgtcatgtct taggggtgag tggtggcaat aagccatgca tgtgatggtg gcgaccggct 120  
tgaaggcaac taggtcaagt ctgtaccgtg tgtgtgcact caagtccgac acgtacggca 180  
tagccgatgg caagtgtgcc ggccaagtct gctagatgca tgcacgtagt tagttggagc 240  
gcatctcatg ctgcaccatg tcgttgccgt tgaggatga tgcgcatgtg ctatatgtac 300  
gtgcatgcat gtaggagtca gcaagaagtt agctggttag tggccgggtg gcgtgcgtgt 360  
gtggtggccg ggtagtggt gtgcgtgcat ctgtgctagc ccgggtataa aa 412

<210> 8513

<211> 378  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-B12  
  
 <400> 8513

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gacctgacag aattatacta aataatgctc ttgttcaatc gtcaggctcc ggttcaagta   120
ctgcaaaaaa aataaactag atcagattta agaaactcaa gattatgttc aaaaagaagt   180
ttgaatatga atctgaaaaa aaatttgaaa ttttaaaatc tcaaaaaagt tgatgtgaca   240
ggtgcactgg atacgtgaaa acaagacgaa cctataggct caggtttcat ctaatttgga   300
tacatgagtg aaaacttatg gctatttgaa aaatcatggt taaacggttt tacggaaaaa   360
aattagctac gggaaaag                                     378
  
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<210> 8514  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-B2  
  
 <400> 8514

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gcagagaaac agaggatctt gaggggcctc atcanaggca ctttctttgc gctgacctt   180
gcgctcctgg ggttcccaag ggagaagcgt tagctgagtt gagctccctc ctttctccag   240
tagagcatag caggattggt catgttcatg agggcgatgt ggtgcacttc tgcaactgtga   300
agcgccagtg cgcgagtgtg ttcaacaggt gtaaaatatg ggactatcat cggattttctg   360
gatgtaattt aattttacat aaataaacct ggtttgcc                                     398
  
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<210> 8515  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-B3

<400> 8515

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cgctggcacc tacgggcagc agggacacgt cgccacgggg acgcatggca ccccggcgac 180  
cggtggcacc tatggggagc agggacacgc tggagtgacc ggcacgggga cgcacggcac 240  
cggcgagaag aagggcctca tggagaacat caaggacaag ctccctggtg gccacggtga 300  
ccaccagcag accggtggca cctacgggca gcaggacac accggcgcg cgacacatgg 360  
caccgggct ggcggcgga cctatgagca gcacggacac actggga 407

<210> 8516

<211> 365

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-B4

<400> 8516

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aactcacttc tatattatca tgtcagggtta gacccaatat agtgaccctt ccagtcagtc 180  
gagaattgca taaagaaggc tacacccttg aggagtcctt tacatgcatc tagaggttta 240  
ctcactacat gatacgtgct ctagacttca gcatcatagt agatatgagt cccacggtt 300  
ggattcaaca caatcattct gtgctttagc caccttttga gagagacaca catgattcag 360  
aactt 365

<210> 8517

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-B6

<400> 8517

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acgcttgacc ctgaccaaga cccaagtac caccgtaacg caaataatga tgatgggttg 180  
 ccaaagtagt atgtcctccg ggcaaggctt aatctgcttc ttcaaaaatt ggctgagaat 240  
 gaccccaacc cgtatgggac accccaacg aagaaagaag cagtctaaac cctgcccacg 300  
 gtcaaaatct aagagggttg caactgttca atctgtcttg atgatcttga tataagggtcc 360  
 caccgctaagc aattgccctg tgaacataaa ttccaccac catgtatcct g 411

<210> 8518  
 <211> 323  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-B9

<400> 8518  
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 tgggccctgg ttgctcgct cgcacgacct caaggaaaga acagctgttt tcttcaagg 120  
 attcaagaac aatgacacca gctatgtcgt cctcatgtgc aacgacccta caaggctcgtc 180  
 attcgagtcg cagatctaca ggccgacctt cgccggcttc gtcaacatcg acataaccaa 240  
 gaccaagaag atcgccctca ggacattgat cgaccactct gtgggtgaaa gttttggtgc 300  
 cggcggcaag acgtgcatcc tga 323

<210> 8519  
 <211> 195  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-C11

<400> 8519  
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 taaatggggc aatttaagtt ttgccacat ccaaaccgaa aggaaaacct ctgtccgggc 120  
 gaatttaacc aaaaaatcat ttatactgga aatggaacag tcccgttcaa aggatccatg 180  
 ctgacaaatg cctca 195

<210> 8520  
 <211> 377

<212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
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<400> 8520

ttcccagagtn cacgggggtcc gtcgacggca tcgctctcca ctgtgggagg atcgccactt 60  
 gcagtgaac gtgatcacg ctccaacctc cgtatcgctg cgcatacagg tgacctgac 120  
 ctctcaccat ttcactcact ctctcagcaa gtcocgccat catgatcctc tgctgtgang 180  
 gggaatccgc tgtcgagcac aagtcctcgt gtccatcacc gaggcacat catatcctca 240  
 caccacggca aatggtacac acatactacg cataatgagg ggatgtacgc tattgcagaa 300  
 tggcacggtc actctcccgt tttacacact ggccggacct agcctcccaa ccccaaaggc 360  
 cttagccctg ctgacc 377

<210> 8521  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-C3

<400> 8521

acgggggtcca tgaatgggcc gaaatcgtgt cagcaatcca ggactcagac ttctggcagc 60  
 aattcttttcg gatcgagtcg gagtttgagg aaatcatcta tcaggatgtc cttcggacct 120  
 cggggcattt ctacctcaa aatcaggagt caaatagtga catcgagaca atgcaacaaa 180  
 tgcaggatga caacgcccgt tctttcatga ctcccaggat acagggcggc ttcacgaga 240  
 cgccggtccc ttgattcgag ttgtctagtt ctgaaacacc gattgggtca tgttgtaatt 300  
 aaacattagt gaacttgtag tatgtctctt tggttttgag agtcgttcaa cttagaagta 360  
 atcgatgcta tcaaagtctt gcttttctct tccgattggt ctgttgcata agtatatat 419

<210> 8522  
 <211> 425  
 <212> DNA  
 <213> Triticum aestivum  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-048-Q1-E1-C5

<400> 8522

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ctcgtctcttc tcggcgttcg caagagacgg cgtgacctgt gaatacatcg agtgcgggcat 120  
gtaacatagg caaatagcct gcctgaagag tgagggagag aaaacctgca tagattttgt 180  
tctggcggtt ttgtgtgtgt ttctagtgtg tgtttgggtt tattttccgc gcttatggat 240  
gtacattaca ggtatataag acagcatagt gatgatgtct tcttcatggg tatggaagtg 300  
aaagtaatgt tatggaagtg aaagtaatgg tatgaatgct gtcttcatgg ttataagaca 360  
gcatagtgtg gatgttttag atacaanana aataaaaaaa aaaaaaaaaa aaaagcgggc 420  
gctct 425

<210> 8523

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D10

<400> 8523

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gccatcatga tcctgacggt gaagcgcgac aacatctgca gcttcatctc gggagaccaa 120  
ccccgggcac gtgcggtctt gggagaccaa ggacagccag ctgacgatgg tggcggacga 180  
cctgaatccg cgggcggtgc tgacgtgccc ggagaagaag atgatccagc agatggtgtt 240  
cgccagctac gggaaccgcg tggggatctg cggcaactac acgtttggca actgccacac 300  
gcccaaggcc aaggagattg tggagaaggc gtgctggggg aagaggagct gcctgctggc 360  
cgtgtcgcac gaggtgtacc gcggggacct caactgccg ggcaccac 408

<210> 8524

<211> 351

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D12

<400> 8524

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acatccgtat tggagcgaaa ttggaatgga cccccctta aaaattttcc cggggaatga 120  
 atgaaacaaa catggctgat ctgacaagcc ccaagttgta aagtgtacc aaatatatgg 180  
 tttcggttgc cgtcttcta gagaggtttt aatgttcaag tggagttata cgtgttttg 240  
 accacggcgt ggttgaatc gttttcgcgt tttaccagcgt ttcccctaac tagtcgggtga 300  
 tcttgcggaa gcaagaggag atataatcac tgcaaatttt ctgccccaaa a 351

<210> 8525  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-D3

<400> 8525  
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 tacgcatagc tatctggcgt cggcctcaac tcgacgcag aaggatgcaa ggacctggag 120  
 gtcttgacc tgtttggtg cgccaatttg acgagcagg gcatagagca ggctgctgct 180  
 aacctgaaga acctggagat gctggtgaag cccaactttt acataccgag gtcggccttc 240  
 cacatggaga ggtacgggca ctggcagtta tacgacgaga ggttccagac aaacgtattt 300  
 cagatatgaa aagaacaacc ctggtgttct cagggtcgcc tctgactgac aacgtctcgc 360  
 atgctcgta ctgttatata ctgtatgtgt a 391

<210> 8526  
 <211> 404  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-D5

<400> 8526  
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 gccagtctca ccgagtcgct ccgctcatc tccggcgct tcgaggtcca tccgtcaagc 120  
 ccgcccga agaggtcaag gggatccccg ccccgagct caagaccatc ggccagatcg 180  
 acgccccta caggaccgcc gccaccgcc ccgacgtgc cccggtcagc gacaagttca 240  
 ccgtcttoga gtccgccttc aacaaggcca tcaaggagac cacgggcggc gcatacgaca 300

actacaagtt cgtccccgcc cttgagtcg cgtcaagca tgcctacgcc gccaccgtcg 360  
cctccgcgcc cgaggtaaag tacgccgtca ttcaggccgc cctg 404

<210> 8527  
<211> 427  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D7

<400> 8527

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cttggagaag acatttgact gatgataaat cattcttacg tcaaactttg aaaagaattt 120  
gcgaatacct ccgggaaaat aagaagagtc aggtaagatc ctggaaaaga catgtgggtt 180  
agggccact caaaagaaac accgtagaac gattgcttga aaagagagag agcgccggtt 240  
gaattaaatg gcttgaatga gataacaacc tcgaaatatt ttgaactgat cttgaaagac 300  
gagacgagcc ttttgagata tcttgagcac tccgggacaa tagaatagcg agagatgaac 360  
gattaagaat tgcaccggca tgagaaagca ttgaaatagc gaaaagaata tgatcacaca 420  
ccgaaag 427

<210> 8528  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-D8

<400> 8528

ccgggtcgac gggcattcgt acaccttgat ttcgagtgtg accacaagcc agagcactcg 60  
atcctcagca agcttcctag cagccagcct tgattaccat ctgaattcac tgtggaaaac 120  
gcaagatggt ggctattttg cttgccgtgc aggattcgct acagtacatg gtgtcttgcg 180  
ctatatggaa gggctgaagt tgagctaggc attgttggcc atctaaatga gataagaacc 240  
agcgttggag actgtataga cttgttttgc ggagccctct aagtgtcatg tttcgagtaa 300  
aagtaggtta cttttgcttc ttgaagctgt cattgtttgt ctgccacgag ggctgcaatg 360  
tggaatggt tgccacaaaa agaaagcaag cgatttttgt gtgctcaaag tcagttttgt 420



<210> 8529  
<211> 269  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-D9  
  
<400> 8529

gcctcttcgg taccgtgcat tgccctttct caccttgaga gttggtgcaa acttcgccgg 60  
tgcattaaaa ccccgatgata cgatatgctc tatcacacat aagcctcatt atatcttcct 120  
caaaccagcc accataccta cctatcatgg catttccata gccattccga gatataattgc 180  
catgcaactt ccatcatcat catatacatg acttgagcat tcattgttat attgctttgc 240  
atgatcgtaa gatagctagc atgatgttt 269

<210> 8530  
<211> 383  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-E1  
  
<400> 8530

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cagatatgct gctgtcagca gtcctctcta aatagacact gcaattatcg tataagtaca 120  
tcattgctgc tgtcagcagt gctctctaaa tagacactgc aattatcatg tacatcattg 180  
ctgctgcaat gaaccattaa gaattattta aaatctagcc taccatctgc gttgtcgtca 240  
acagaggggtt gaggcggagt taaaaaatct gtatgagaaa ccgagggatt gtccgagtca 300  
gcgacatctt tggtatcttc agagctgtca gaagcagctg agatggcgctc acctgattct 360  
gaatgtgttc tgtccacata tgc 383

<210> 8531  
<211> 385  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-E11

<400> 8531

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aaggatttca tcaccgacct aggagtcata cccaatgcgt cggggccaat caaactcttc 120  
tgtgacaaca ctggagctat tgcccttgcc aaggagccca ggtttcacaa gaagaccagg 180  
cacatcaagc gtcgtttcaa ctccatccgt gaaaatgttc aagatggaga catagaaatt 240  
tgcaaagtac atacggatct ggatgtcgca gatccgttga ctaaacctct ctcgtagagca 300  
aaacatgata aacaccagaa ctctatgggt gttcgattca tcacaatgta actagattgg 360  
tgactctagt gcaagtggga gactg 385

<210> 8532

<211> 386

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-048-Q1-E1-E3

<400> 8532

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ttcaatcagg gaatcgtgcc ttccacagtc tggggattca anaaggaaat tgaacccgac 120  
gcacaaccgg aagccaaggt tctacaccaa ggtgtttaag gaatgccact cctatgacca 180  
agaggggaat tcctttgagc tttctctggt aacttccaag tgcattggag cttatgtgaa 240  
aagcaagaag aaccagaacc agatatgttg gctgtgggag aaggtaagt gcacagaaga 300  
caaaggcttt cagagattcc tggacaatgt gcagtacaaa tccactggaa tcttgcgtta 360  
tgagcgcgtg tttggggagg gttatg 386

<210> 8533

<211> 160

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-E4

<400> 8533

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cgtaaagaag tgaacaagaa agaaaaggca aattaaattg caaagggttaa attggggaaa 120  
 agaaaaccaa aagcaaattg caagttataa aatgccaagg 160

<210> 8534  
 <211> 372  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-E5

<400> 8534

cggggtcgac cgaggagagc tgagctgacc aactggtttg cgccatgtca taaccgctcg 60  
 attgcggcag ctcatggcaa ctcatgacc tgcagcatag aatctccatg ggagacctgc 120  
 cgtctggtgg cacacttcaa tcggcataca acagatgacc cgttcatcag actgtataca 180  
 aaggccaacg atggctcata tatcgatcac aaggagatcc ccctgggtgtg gcatcactac 240  
 gacgcggatt gaaacttcgg ttcatgccag gcgaatgagc tgctcaacca tctcgagagc 300  
 gtgatcgcta acaaccgggt cgtcgtgaat acgtgccatt acatcgtggc ggttcaccc 360  
 cagggcatca gc 372

<210> 8535  
 <211> 345  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-E9

<400> 8535

gcccctcccc tccaattgca aggcgcccac atccggagtt ccgggccaac cgatctaacg 60  
 ggtaaacctg gcccgaaaca ccaaacccaa ccgggggataa ccaccaaag gggtgtgga 120  
 aaaatagaaa aaggaatttc tcgataagtt gatttcgagg taatatttgt tctcccgct 180  
 cggttcattt gctgtataac catcaaactc ttgatataa gagttttgtg ttttaacttc 240  
 cagtgtgtgt gttcatatat gactaatata ttctcccca aatgatataa aaaaaaaaaa 300  
 aaaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaggataag aaggt 345

<210> 8536  
 <211> 377  
 <212> DNA

<213>       Triticum aestivum  
 <223>       unsure at all n locations  
 <223>       Clone ID: LIB104-048-Q1-E1-F1

<400>       8536

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gaaaggcgag gatgtgaact ccctgcagcc caaggaactg atcgccattg aggaagctct  120
cacgaacggc cagaccaacc tcagggacaa gatgatggac cactggaaga tgcacaggag  180
gaatgagaag atgctggagg aggagcacia gctgctggct ctgaggatgc accagcagga  240
cgacctgagc agcggcatga gggagatgga gctcgggtac catcanggtg nggatttcac  300
ttcccagatg ccgttcacct tccggctgca gcccagccac cccaacttgc angaagacaa  360
gtatgccacc gaatcct                                     377
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<210>       8537  
 <211>       401  
 <212>       DNA  
 <213>       Triticum aestivum  
 <223>       Clone ID: LIB104-048-Q1-E1-F12

<400>       8537

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ttgatatttg tattagcagg tttgagtttt gcatgtagtc tactccattg tggagttcgt  120
ccgacgaaag ctttatgtga tcgcgccaaa gaggtgagat gccagaacgc cgtgtgacgc  180
ggcgagcacg gcgagatgcc gatgggtgctg cgttagaagc ggcaagacgt atcacaggct  240
ggagccgtga tggactgcat caaattgggt cgggtgaacc ggccgggtcgt tctgtttggt  300
ggactacctg ttcctgcgtg agttcgttta gtcctagccg agagtatcgt tgctagtact  360
tgatgcatgc atgtagttgg cctggtcaca agtggttacc g                                     401
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<210>       8538  
 <211>       409  
 <212>       DNA  
 <213>       Triticum aestivum  
 <223>       Clone ID: LIB104-048-Q1-E1-F2

<400>       8538

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ttcttcaagg gaaagggcct taaaccgaac aacttatcac ggtcccgttg aaggattttt 180  
ggcggggcct attctgcccg cggccagaca gggaccgcga gcagcgggtt ttggccatga 240  
gctgggtcca ctacgaggct tgcaacaacg cggagtagcg gacgaccgct aaggccgtga 300  
tcaccaaatt ttgggtaagt tctcttctga atcacttgtc ttcagtttcg ttcatagttt 360  
atcattgaat cactcaactc atgccttggt tgcttcgggt ttttgcattg 409

<210> 8539  
<211> 272  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-F3

<400> 8539  
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ttcgttggtc gttatgagta atatataac tccttgggat taataaatca tgggaagata 120  
aaagcacttg gcgtatacgt atttgacgtg ccaaactctg tgtatccagt gtgtatcggg 180  
gtacgcattt gagacttcca aacgcgtagc acgtgtgaaa gtaattgcat ctatagccga 240  
cttcacaaaa gaaataaaag aaaaaagaca aa 272

<210> 8540  
<211> 378  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-F9

<400> 8540  
gaaaccgaaa aactttcgta aatcacaaat ttacctcaat ggggaaatgc atttccccaa 60  
cattaagcat ttcaaatttc tttttgacag taggtagagg tatttgaaaa cttccaatag 120  
tgattgtcgg agatttttca ataacattaa taccattcac ctggaattgt ttcttcgaaa 180  
agtgcaccgt atgctcatta ccattgatat gaaaagtgat cttgctttta ttgcaatcaa 240  
taacagcccc tgcggtattc aagaagggtc taccaaggat aattgacatg ttgtcgtcct 300

cgggcatctc aagtataaca aaatcagtca aaatagtaac attagcaaca acaacgggca 360  
catcctcaca gataccga 378

<210> 8541  
<211> 397  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-G11  
  
<400> 8541

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tttggccttg gtttaggatg gggctttgga actgcttatg gttgtcaata tcgatcttca 120  
agggtccagt ttcagggcat tgagtttcag aaaaagtctg aaggagatga agcaccaaag 180  
cttgttgaaa agtctcgtcc ttatggctag tatagctgcg atcatacaat tggcacaggc 240  
aatgttacca ttgccccctt gattgtagtc aattgtctac ctggaaagtt gtttgaaagc 300  
attttgatgt tttgatgaac ttggacgttt tcatggtaac ataatgagga taatccatgg 360  
tacttttttc gtttcggaaa aacaaaagaa acacaaa 397

<210> 8542  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-048-Q1-E1-G12  
  
<400> 8542

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cagggagtcc tgcttcacc agtctgggga ttccaagagg aaagtgaacc cgacgcacta 120  
ccgggagcca aggttttaca ccaaggtggt taaggaatgc cactcctatg accaagatgg 180  
gaattccttt gagctttctc tggttaacttc caagtgcatt ggagcttatg tgaagagcaa 240  
gaagaaccag aaccagatat gttggctatg ggagaaggtc aagtgcacag aagacaaagg 300  
ctttcagaga ttcttgaca atgtgcagta caaatccact ggaatcctgc gttatgagcg 360  
cgtgtttggg gagggttatg tcagca 386

<210> 8543  
<211> 419  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-G3

<400> 8543

cacgggaacg ccgtaaacgc cgcacgccgc gccggcgctcg acatcgacat cgccaacaag 60  
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gatgatgata cagagaatct tgctcatgag cgtgtgccgt cagacctgaa gaagagcatt 180  
atgcaggcta taacggacaa taggctcaca caggcacagc ttgcacagct gatcaatgag 240  
aagccacaag tcatccagga gtacgagtca cgcaatgcta tcccaaacca acagatcatc 300  
ggcaagctgg aaagggctct tggcacaag ctgcgaggca agatgtgaag ccgctgcat 360  
ctgacaggag tcgaggcttt caacagagct tggctgggca agtttaccgc taaataaag 419

<210> 8544  
<211> 310  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-G4

<400> 8544

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cgatgggaga tgtgccacgc tcttaaatgc cagtcttctg ctctaattctt gccaaattac 180  
ttgttgcaat ttggaacttg gccaaaaaaa aaaaaaaaaa ataaaaaaaa acaacaaaac 240  
aataaaaaaaaa aaaataagaa aaacaacact tgatgaaaaa aatttcatta aaaaaagggc 300  
cggttccaaa 310

<210> 8545  
<211> 414  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-G6

<400> 8545

eggactctac taatgctatt atggctgaag cggaacttac cttaaagtct cctgctgatg 60  
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 tgtcaatgga tgaggggtgct tcaggatctg cagctgtggc tgatgctgct atggcagaag 180  
 ctgctgcaga tgaccaggat ttggcattgg ctcttcaaat gtctgtccag gacgcagagg 240  
 tggctgggtca atctgatatg agcaaagtgt ttgaggacag gtcatttgtg acatccatcc 300  
 ttaattcgct tcctggtgtt gaccccaatg acccatctgt gaaagatcta ctggcttctt 360  
 tgcattggcca aggagagcag gaggagaaga aagataagga ggacaagcca taca 414

<210> 8546  
 <211> 413  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-G8

<400> 8546

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 acatagtcag tggtgcaaaa acatagctgc ttcaaaaaca tccctcgtgc ttcaacaaga 180  
 acggcagagc tgcaagacaa ggtaaccgct atggcgggat gtttctgaaa catggcctat 240  
 gttgcagaag tccacgagac catgagaaat aaattccgca acacaatctt tggtgcaaat 300  
 atttccgtta cagagctct gttgcaaaga tccgcaacac aatctttgtt gcaaatgttt 360  
 ccgcaacaca agctctgttg caaatgcttc tgcaacacta cctttgttga aaa 413

<210> 8547  
 <211> 364  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-H10

<400> 8547

gccgagtcga tgctactgtc gggagcgccc tagacatatt cgggggagat ttgccctacg 60  
 acactgttgt ccattggcac aaggagcaaa acctgggttag ccaacggtga agaaatcaga 120  
 tgatcctttt atagagcatg atcaaaagtt cagagctcat gtgtgatccc cacctgacca 180



taggtcaggt tatagagctt tgttgtttgc tggacattgt agtgtgaaca ttgtgtgtgt 240  
 cttgtgtgac atgtcaaagc tgaagcggag gtgtgaactc ggtgtggtag aagaccactc 300  
 ggtattcaga tactgttctt cacattctgt ttgtattgtg gtactggtaa tgatgaataa 360  
 acag 364

<210> 8548  
 <211> 391  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-H2  
 <400> 8548

cgggatcccc gtatgaagcg gagtacatgg cagcctcgga ggcagcacat gaagcgattt 60  
 gggatgaagga gttcatcacc gacctaggag tcatacccaa tgcgtcgggg ccgatcaaac 120  
 tcttctgtga caaactgga gctattgccc tcgcaaagga gccaggttt cacaagaaga 180  
 ccaggcacat caagcgtcgt ttcaactcca tccgtgaaaa tgttcaagat ggagacatag 240  
 agatttgcaa agtacacacg gatctgaatg tcgcagatcc gctgactaaa cctctctcgc 300  
 gtgcaaaaca tgatcaacac cagaactcta tgggtgttcg attcatcaca atgtaactag 360  
 attagtgact ctagtgcaag tgggagactg t 391

<210> 8549  
 <211> 226  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-048-Q1-E1-H3  
 <400> 8549

tcatttgccc ttagccatgc gccgtttgca ttcactattt gacagtgagc ggtacatagg 60  
 aggggacaat ctttattttt gggtacatgc tgattacaga cagtgtactg gttctgtcga 120  
 ccgaactatg gagcatgtct ttgtcatggt caattgattt ttcttcttca ttctgctgta 180  
 ttactgacct tgatattcaa cctgaagtgg gtgggtttat tcctcc 226

<210> 8550  
 <211> 379

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-048-Q1-E1-H4  
  
 <400> 8550  
  
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 ccattcgatt tcaagacgga tgaggagcag gtcacaaag ggctggacac gacagtgtc 120  
 accatgaaga aaggagatgt cgcgtcagct agaataccac ctgaacatgc gttcgggtcc 180  
 actgagacga agcttgatat tgctatggtt cctcccaact ccaccgtctt ttatgaagtg 240  
 gacctcgttt ccttcgagaa ggagaaagaa tcttgggact tgaagagtaa tgctgagaac 300  
 atcgaagcag ctgctaaaaa gaaagatgaa ggaaatgcgt ggtttaagat gggcaagtac 360  
 gccaaaggctt ccaagagat 379

<210> 8551  
 <211> 266  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-H7

<400> 8551

cccgggtcga cggggagcac aagaaggacg gcgggcacca cgagggcgtc agcgagcaca 60  
 tcaaggacag gatccacagc gacggcatga tggacagcat ccacgacgag atcaacgaca 120  
 acagccacag caacggcaag aaggacggcg aggaccacga ggacaacgac agccacagca 180  
 acaacgacag caaccacgac aacgaccaca ccgactccga cccgcactcc agcagcatca 240  
 acgecagctc catcaacagc acctgc 266

<210> 8552  
 <211> 402  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-048-Q1-E1-H8

<400> 8552

tccgggtcga cggatagtag taataaaaag gctagtcaca ataatggtgt ccagcacaac 60  
 ccacccctca aataaaacta agggggtgct tggatatggt ttagtcccat gactaaaagt 120

agtgggacta aaacatgcta gcctcaccca tgcttggatc cgaataactaa aaaggctaaa 180  
 atcaagttaa tgagcattta ttatcctcca aacctccaa tccataactc gcctgtgtta 240  
 aaggagagga gttaaagac tagagagagg actaatccac attttactag gggtagccct 300  
 gactaaattt ttttagtctc aagactagtt ttagccccctc ttttagtcagg ggtgcttgga 360  
 actttagcct cttaaagaga ctatttttag tcagactaaa at 402

<210> 8553  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> unsure at all n locations  
 <223> Clone ID: LIB104-049-Q1-E1-A1

<400> 8553  
 tacggtccta cnattccggg tccacagcca ggctccagga caccgccaat ggactccgaa 60  
 ctacttcgcg gcaggatagc ccggcccgtc cagagctcaa ttaaactc cggcgaaggc 120  
 taggacaggc cgcataccgc ggctcaaccg ctctccggca cacaacatt tcttacattt 180  
 gctttgcagg ttcacctttg caccgaccag gactggcgat atggaagcaa ctogaatgcy 240  
 caagggaatc cttagatatt ccccgagtg accatccgaa tatactctgg atccacacac 300  
 agcttcttcc cccctgatct cagcagggtc cacagtcata tccctttttt tatctcatta 360  
 cctgtcctca tacgcatcaa cgtactattc aaatacaaca tatggattta tatgacgctt 420  
 atctgc 426

<210> 8554  
 <211> 358  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A10

<400> 8554  
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 gcatttcgat agccattccg agatatattg ccatgcaact ttccaccatt ccgtttatca 120  
 tcatgacaca catcattatt gtcataattg ccttgcatga tcatgtagtt gatatcgtat 180

ttgtggcaaa gccaccatgc ataaattttc atacatgtca ttcttgattc attgcccac 240  
 ccggtgcacc gccggaggca ttcacataga gtcataatttt attctagttt tgagttgtaa 300  
 ttcatgagtt gtaaataat agaatgtga tgatcatcat tattagagca ttttcct 358

<210> 8555  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-A11  
 <400> 8555

gacgggaagg tcaatactga tatgcttggc cccacgcgta gtagtcttct tcaccctgca 60  
 aaaaaataaa gcacatgaaa aaggtattaa aaatgaacaa aaatatgttt gccttggtag 120  
 aaatcttaaa aaaatgaaaa acaagtggaa aggctggtag ttgccatgta aggggaacgt 180  
 gagttgccat gtgtcataat tagcagttgc catccagcag cagttgccat gttagccaac 240  
 ttgaagaatg ataaaaatgt ctaatctgtc atgaatacaa tttcaaacct aggtgtagga 300  
 tgagctcaca agccaacggt aaagatggca gttgccatta ggtacattaa agttaccatt 360  
 tggcctagat tccagttgcc atgtaaaaaa caataggagt tgccatacac 410

<210> 8556  
 <211> 410  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-A12  
 <400> 8556

gacgggaaga gacagatttg cctaggggtt gtggcagtgg ctaagacatc tgaactctgt 60  
 ggcgccggat agaaagaatc ggtggggccg agtttgactt taggtctagg tcatatgtgt 120  
 ggaagtagtt gaggggtttg gagcatatca cgaagcactg tggagcaaga aactcattaa 180  
 gcaacacctc atccctcctt gatagtactg gcttttccta tagactcaat gtgatcttgg 240  
 atcactaaaa tgtaaaatga agagtcttga gcttgaagct tgagccaatc ccttgtcctt 300  
 agcatcttga aggagttccc acatccttta gtccatgcca ctccattgtt ggacttgtct 360  
 aaaatgtact aggtaaaagt gttagtccaa caagagatat gttgacatta 410

<210> 8557  
 <211> 377  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A3

<400> 8557

cgcgtaaaat ttgaactgta gctgcctcat agtttgctct atattttttt cagaaatcat 60  
 ttctaggtac ataagtatct atttaacaga gaaacatcaa aagttttcca agatttaacc 120  
 actagctagg aacgggtcaag cccgcccttt tgaccgcatt ttgaaaaggg cataaaaaat 180  
 tcaaaaaaat caaaaaattg gaaaaccttc gcattgtgtc attatatgtg accaagtttc 240  
 cacgaaaaat aataaatttg ttatacggaa attgttttta aaaagtgttc tcaaaaatga 300  
 gttgtcatgc gtgaggattc atggctttca agccaaatga tcaatcttat ggccacattc 360  
 atggcatagt ttgttca 377

<210> 8558  
 <211> 378  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A5

<400> 8558

cggaaggccg ggcacccgc cggccttcag gaacgccgac ggcgggtacg gcaccatcaa 60  
 aaccggctac ggctacaagt acaccaggtt ggcgacaccc aaacgggtcca agaagaagag 120  
 ctggttctcc tgcaccagct gccgattctg atgccgtagc tgcttgccgt cgttggtgag 180  
 agagatccga tacttcgccg cgccacgacc agaagcacgc actccgggag gcgacggtgg 240  
 aacttttggc gatcttggcg tttttgtccc tgctcggtcg ccgcacttgg cgtgcagagc 300  
 atcatcgaca actgatggct cccgttcata tgtacgaata atttgtggcg aataaaaggg 360  
 gggaagtgac tacaacaa 378

<210> 8559  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A6

<400> 8559

gggtcgacgg aaattgcaaa cctaacgaag ctcataatca ggtggttgaa gtgaatgtca 60  
aagtcgaaaag tgcaggcaca aataatgtgc acaacaatgc tttctatgct gaagaaaaaa 120  
tactgaaatc cgagttgcaa gcaatgagag attgtgaccc ttcattctgcg cggcattgga 180  
ttgttaggaa cacaagggct gtaaatacgta ccggacaacc aactggtttc agactcgtgc 240  
ctggttcaaa ctgtttgcc tttgctctgc ccgaggcaaa gtttcttcga agagcagggt 300  
tcctaaagca caatctttgg gtgacacccat acaagagcga tgagaagttt cctggagggg 360  
agttcccaaa ccagaatcca cgtcttcacg agggtttggc t 401

<210> 8560

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A7

<400> 8560

ttgaaaatct gattggcaag attctgaagt gtctgatgcc cgggtgggcac attttcatca 60  
gggagtcctg cttccaccag tctggggatt ccatgaggaa agtgaaccgc actcactacc 120  
gggagccatg gttttacacc aagggtgtta cggaatgcca ctcttatgat caggatggga 180  
attcctttga gctttctctg gtaacttcca attgcattgc atcttatgtg tagagctata 240  
tgaacttgcc cagatatgtt ggctatggca caaggtaag tgctacgaag acaaaggctt 300  
tcagatatcc ctgtacaatg tgcattacaa atctcctgga atc 343

<210> 8561

<211> 350

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A8

<400> 8561

gagcacatga tcgccagctg catcagggtg gcatgtttga catgatcatc gacaacatca 60  
gtgggggtcgt ggcagccata agcacaggaa tgaccatgtt cacattaagg ccgatgagca 120

cagcatagaa cgatggtgag cactatatgg tcggcgagca catggatggc atgttgagaga 180  
 ttatcttcgt taagatcagc ggccattgcc actgtgaccg catgaacgac tgtgaccaca 240  
 aggatattaa tgtctataac accaataacg tcaacattca ggcgagggcc atttgagcga 300  
 ttacggccac ggcatcatca gcatctacag cgacatcgac tgagccatct 350

<210> 8562

<211> 372

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-A9

<400> 8562

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 gactaggcca agtgacatga cagtgtattc ttatgtaaca tatcttgtcc tgaaatgccg 120  
 tcttggaat atcttgctca cggattcgaa tctgatgata acccatacgg tgatcaagct 180  
 tggngaatac ttgggcacct ttgagttgtt caaacagctc attgatgttg ggaagtgggt 240  
 atttgctctt tatattcttc ttgttcattg gacggtagtc aacacaaagc cggtcattc 300  
 catcttctt cttcaciaaac agaatttcac aaccccatgg agaagagcta aggcggatga 360  
 aattcattct tt 372

<210> 8563

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-B11

<400> 8563

ccgggccgac ggcaaggaga agtacgcctt caacggcgtg tccacacccg accccgagac 60  
 gccgtcaag ctgcccgagt acttcaacgc caccaaggga gtgttcgagt acaacctcgt 120  
 caccgacacg ccgccaagg agggcacgcc catcaaggtc gccccagcg tcatcaccac 180  
 cgagcaccgc acctacattg agattgtctt cgagaacccc gagaagagca tcgacacctt 240  
 ccacctcgac ggctacgcct tcttcgccgc cggcatggga ccggggctat ggtcggtgga 300  
 gagcaggaag acatacaacc tcctggacac ggtgagccgg cacaccatcc aggtgtaccc 360

gaggctcgtgg acggcgggtga tgctgacgtt cgacaacgcc gggatg 406

<210> 8564  
<211> 382  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-B2

<400> 8564

gtccatagtt gattttttaca atgctctttt gcttcactaa tatttgtag agcgtgggca 60  
tatcttttgt aaaaagaatt aaactatctt gcttcactta tatctattca gagagatgac 120  
aggatttggg cattcacatg gttagtcata aaatcctaca taaaacttgt aaatcgctga 180  
atatgatatg tttgattccc tgcaacagtt ttgcgatata aagatgggtga tattagagtc 240  
gtgctactgg ttagttgtgc gttgtagaaa tacttgtgtt gaagtttgtg attcccgtag 300  
catgcacgta cgggtgaaccg ttatgtaacg aatttggagc atgaggtatt tgttgatttt 360  
cttccttagg agtggcgggtt gg 382

<210> 8565  
<211> 389  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-B3

<400> 8565

cccctgaaag agagagatca ccgggttata tctggcactt ggaaggggtgt gttttattaa 60  
gtatccagtt ctagttgtca taaggtaag gtacaactcc gggtcactct ttaccgagg 120  
gacacgacta ttcgaataga taaacttccc tgcaggggtg caccacataa cccaacacgg 180  
tcgatcccat ttggccggac acacttttct gagtcatgcc cggcctcgta agatcaacgc 240  
gtcgcagccc caccaaattt ccgccgaagc agaaaaagca tcgtctcgtc tcgtctcgtc 300  
gaggaatcaa cagccatggg cggcggcaac gcgcagaagt ccaagatggc gagggagagg 360  
aacctcgaga agctgaaggg cggcaaggg 389

<210> 8566  
<211> 400  
<212> DNA



<213>       Triticum aestivum

<223>       Clone ID: LIB104-049-Q1-E1-B4

<400>       8566

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ccaaggaggt gtatggaagg ttcgagtaga actgcccgat gcgtatcctt acaggtctcc   120  
gtcgattggt ttcgttaata agatatatca cccgaatgtc gatgaactgt ctggttccgt   180  
ctgcttggat gtcattaacc agacatggag cccaatgttt gatcttgtca atgtgtttga   240  
agtcttcctt ccgcaacttt tggtatatcc aaatccctct gatccattga atggagaagc   300  
tgctgcactc ttgatgcgtg atcgccctgc ttatgagcaa aaagtgaaag aattctgcga   360  
gaaatatgcc aagccagagg atgcgggtat aaccccagaa                           400

<210>       8567

<211>       372

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-049-Q1-E1-B5

<400>       8567

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gcaccacccc ggcggtggcc atgctgacgg tgagcacgct gccgatgctg gcggagctgc   120  
ataagatgga gcatgagatc agctcgccca ccccgcgcaa gggctacatc aaggctttct   180  
gatccgatcg agatgaccga tgcacgcacg ggcgcatgca ttcaggagat gaatcaatcg   240  
ctaatgattg gcaaaccgac cgccagcaga gatacgttta tatagttctt aatttcagtc   300  
gttcgtttgt aatggtctgt actagtagca cagtcgtgtg tggtgtgtgc atccatgggt   360  
ctgatatacc gg   372

<210>       8568

<211>       367

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-049-Q1-E1-B6

<400>       8568

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tcttttggtta aaagaattaa actatcttgc ttcacttata tctattcaga gagatgacag 120  
gatttgggtca ttcacatggt tagtcataaa atcctacata aaacttgtaa atcgctgaat 180  
atgatatggt tgattccctg caacagtttt gcgatataaa gatgggtgata ttaaagtcgt 240  
gccaatgggt agatgtgctg tgtagaaata attgtgttga agtatgtgat tcccgtagca 300  
tgcacgtttg gtgaaccgtt atgtagtgaa gttggagcat taaggagttg ttgattttct 360  
tccttat 367

<210> 8569  
<211> 378  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-B7

<400> 8569

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aaataacgct cttgtacaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaaa aaggggcccc caaaaagatt aaaactaaat tacccttaaa tgcaaattaa 240  
aaacccttca aaagggttaac caaaattaaa ttaaaggggc ttctttttaa aaattcgtaa 300  
cgggaaaaac cctgggttaa ccaaattaaa ccccttgaa aaaaaacccc ctttcccaaa 360  
gtgggttaaa accaaaaa 378

<210> 8570  
<211> 397  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-B8

<400> 8570

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gcttagtaga attaaaactg agtttgtgag gtgtgggttc agtactacta gccacaagga 120  
ggaggttagc cttgatgggc aggtgatacc tcagaaggac aattttcgat attaggggtc 180

aatgctgcag gatgatgggtg atatcgatga agatgtgagc catcgaatca aagctggatg 240  
gaagaaatgc cgccaagctt cctctgtgac aatagtacca caaaagctaa cattgcaggt 300  
tctataggac agcgattcga cctgcgatgt tgtatgaagc agaatgttgc caaataaaaag 360  
gcaacatgtc caacagttag gtgtagcaca gatgcgc 397

<210> 8571

<211> 375

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-049-Q1-E1-B9

<400> 8571

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aagcatcaca ttaactatctt cagctacggg cttaatcaat atatatttac ctgaccggac 120  
tcggttcggg caatggagca gtctgcacgg tcaccatctt gtacctccat tgtgtcacct 180  
gagcactcgg caggggtctcc ttcttgtacc tccactgtgt caccgaacc atcatgaaaa 240  
tagtcctctt cttgtaccag cattattggc ccgaanccat tattagcata gccctcttct 300  
tcagccagtc cttccagctg actatcactg tcgatgacaa atgacgcaac ttcatcactt 360  
ccatttgcca ttatg 375

<210> 8572

<211> 399

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-049-Q1-E1-C1

<400> 8572

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ctgcgttttc gttgtggtga agatggcgat atcgatggag cgcaggaaga tgaagcccgt 120  
ccttgccttc gtgctgctgc tgcgtgcca tcttcttctt ccgctggtct cctccgtgcc 180  
tgtgtcgagt aagtgtttga cctccaacc catgcacgca tgcattggacc ttactttaat 240  
acagttcatc ttctttcttg ggatgtgtat gtgcatgcat gcatcttaat tttgagcctt 300

gctctcggat gtangaagcg tggccttggg aaatcatcta gcctcagctt ctagtctaac 360  
tctggaggcg ggcctgttc aggtcaatct ctactcta 399

<210> 8573  
<211> 411  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-C11  
  
<400> 8573

ccgggccgac gggactcaag atgtttcgag aatccaaatc cgacgtactt attctgtatt 60  
tgatgaaatg acaggataat tatggggtag tttttgactg cgttgacatt tacaagcagc 120  
ccgcattcga tcacctctc ctgaagaacc acatactaca ggtcaccatt ctatactttc 180  
tatctttact gtcaaaaaat tgtaggaatt tttgttgctt tttgaaacat ggtacgaatt 240  
cttgatgtaa tcagtttttt tagtcatcga tgtcagattt acagatctat ccgcccttgt 300  
attagactct gacgtgtcct tgtagtattc ccgagcactg tggttgatac ggcacatacc 360  
atagcaaatg gctctcga aaacaacggc actatagttc tatttccac t 411

<210> 8574  
<211> 425  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-C12  
  
<400> 8574

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gtgacggctt catcgacttc agcgagttca tctccttctg caacgccaac cccgggctca 120  
tgaaggacgt cgccaaggtc ttctgaatca gttcatttca cctcagccgt ccgatccagg 180  
agccgatcca tctacgtacg gtttcgcata tcaatttcat gcaactacct actccggtcc 240  
cgatccagcc tcagcttcac ctgaggccgg ccctaatttt gtttgatcat ttttttttgc 300  
taccagtagt aactagtgat gatcactgtt ccatcattta tttattttat atcatcacia 360  
gtttcttttc tttctctacc tttttgtcga tcgtcggctc cagctcgatc caacgatcca 420  
tgctg 425

<210> 8575  
 <211> 395  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-C3

<400> 8575

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 ggggtgagca taactaattc aaaaaaatc aaaaaatat aaaacttggt cacatagtct 120  
 tattatgtcg tatagtaacg agaaaaaaaa tataaatatg gtttacatac atttttacga 180  
 aaaatccttc aaaaaattgt tattcctcaa acaatgtagt atggagttga agggagagag 240  
 tagtgggcac ccgagagtag gtggagtttt aaaaatgaaa agtgtgaaaa ctcaccaaaa 300  
 acttcatttt ggattgacta agaaagatct gaacttactt ttctcatttt catgttttaa 360  
 acttgtttta tatataattt tctattaaac cttgt 395

<210> 8576  
 <211> 397  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-C4

<400> 8576

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 atttgctaga atatgctatg tgcttcactt atatcttttg agcttgatag tttttgctct 120  
 agtgcttcac ttatatcttt tagagcacgg tggtgactta tttttgtaga aattgctagt 180  
 ctctcatgct tcaacttatat atttttgaga gtctttttaga acagcatggg atttgctttg 240  
 gttataaaat tggccctaga atggtaggca tccaagttgg gtataataaa aactatcata 300  
 ggaagtgaat tggatgctct ggtcaatttg atacttaata attgttttga gatatggagg 360  
 tagtgatttt aaagtcatgc tagttgggtg attatga 397

<210> 8577  
 <211> 396  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-C5

<400> 8577

cggggtcgacg gggatctaaa cagtactatt cttctgctta tgtaaaccacc ttggtgtaca 60  
accatgtcag taagaccctg ttgctttttt tgatagcatt ccagtaacca ccgatggacg 120  
agaactttgc ctattgggtcc gtctcggtca atgagcagga aaatgggttct cttcgtccct 180  
cgcccttggg accaatgggt gttgccaaca taatcgatag tctatcctct ggcattgcctt 240  
gcttacatga tcatgcaaga cgtcatcccc cttccgactt ttaaccaca tgggtgggcc 300  
ataaccaca atttcacagg atcgaaacct gactctcctg tacaccctgt tgtcaaagtt 360  
attcccacgt ttgactttga cgtaattcac gggcca 396

<210> 8578

<211> 389

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-049-Q1-E1-D1

<400> 8578

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aaggcaatgc cgagtcttat ttttacaaaa gtccaggaag acaattgtac ttcgtcaaca 120  
tgtgccattt gcttgggaaga ctacagtgtt ggtgaaaaga taagggtgct gccttgctgt 180  
cacaagttcc atgctgcttg cgtggacctg tggctcacat catggaggac attctgcctt 240  
gtatgcaagc gagatgcaaa tgctggaatg tcaaatttcc ctccatcaga gtctaccctt 300  
ttgctttctt ctgctattcc cttgccagct gaatcgacag ctttgtcttc ttttcgttca 360  
ttggtancag catctcctcc aaggacaat 389

<210> 8579

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-D10

<400> 8579

acgggaatgt tgatgaggct tgcactgggt tgaatgttgc gggtatgggt ggtggattcc 60

ccaggaagga aggaatggaa aggaaggatg ttatgacgaa aaatgtttca atctacaaag 120  
ctcaagcatc tgctcttgaa gctcatgcag cccccaattg caagggtttg gttgttgcca 180  
accagcaaa caccaatgct ctcatcctga aagagtttgc tccatctatc cctgagaaga 240  
acatcagttg tttgacccgc ctagaccaca acagggcact cggtcagatt tctgagaaac 300  
ttggtgtcca agtttctgac gttaaaaatg ctattatctg gggtaaacac tcctcc 356

<210> 8580

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-D12

<400> 8580

cccgggtcga cggggacgat gacttctgtc agcacgacga cgtgatgacg gttttggtga 60  
tgtgaacgcc atcgccaaaa atgagccatg ggtacatgct aaacacgtca cataatgtgt 120  
cttcataact gatccgatca atcacagccg tgttgtcgtg aggagaagca aaaggagcat 180  
tgccgaaatg gatggagtcg ccaacgagga agaccacgac cagtacggtg atccgatgag 240  
ggaagatgat gctgatgacg atgaaacata cgtcaaaaga agaacaaaga ttacattacc 300  
tacgaaagat cgtaatccct ggagaaggaa aactcacgac catggggtca attattcgac 360  
aatgaacaaa agagggaaga atattagtct aaagcgtcat cgtcgccccaa gctgacaaac 420  
taatc 425

<210> 8581

<211> 311

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-D2

<400> 8581

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cggttggaagaa agaattggcg agttgccaat agccggttgc aaaaaaaaaa gttcaaaggt 120  
ggctggcctt tgaaaaaaaaa ttaacgggtg agaagggcgg tttgccgaaa attcgggtgg 180  
aaaaaacaag acaaaacaaa tgtgtgtccg agctggcaaa agtgtgtctc gtacgcgtgt 240

gggtgcgcttg aaggattgca aagagcgaga gtgttgcttc aggctgtgcg tgcacacgcg 300  
tgtggagaac a 311

<210> 8582  
<211> 373  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-D4  
  
<400> 8582

cggcagtacc acaaagagct accagcgcca gacgtggggc cgcgtgctga acgtgctccg 60  
cgacgacggc gggatcacgg tgaaggggca cgtgcagaag ccggtgctca aggaacgggt 120  
caagcagttc aacgcggcca tacacgagat ccagcggacg cagggcgcggt ggggtggtgag 180  
cgacgagcag ctgcagtcgg agctccgggt atccatcacc gccgtcgtgg tgccggcgta 240  
ccggtccatc ctcgcccgct tcgctcagca cttcaccgcg gggaggcaga cggagaagta 300  
catcaagttg agcgcatacg acctcgaggg catcatcgag gagctcttcg agggcagcgc 360  
cggtccaag tca 373

<210> 8583  
<211> 315  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-E11  
  
<400> 8583

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aagctgctgc agcgtggagt caggagtgtg ttgcacccc gccgtgtccc agtatgtgct 120  
ttggaagact ggcgtcaatc tcaacagacc cttatgcgtc cacattattt gcttcacaaa 180  
cagatagcat ctctctgctt cgtctctgga gtcacaaagc tcgatgacag ctagatacgg 240  
atgatttaca ggtttggagc caaaatataa ttggctagtc tttttgaaca catgatgtaa 300  
cacaaaagtt attat 315

<210> 8584  
<211> 409



<212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-049-Q1-E1-E3  
 <400> 8584  
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 aatctatgga tgtgaatttt gttggttaga atagtttttg aaacaacact tatagaggga 120  
 attttaatcc taggccttat cctagtaatc cttctaataa ttatggaaat tcctacaata 180  
 actcttatgg aaattttaat aagatgccct ctgaatttga gagtagtggt aaagagttta 240  
 tgaattcaca aaagaatttt aatgctttgc ttgaagagaa attgcttaaa gttgatgatt 300  
 tgtctaggaa cgttgataga atttctcttg aaattgattc tttaaaactt aaatctattc 360  
 ctccctaagca tgatatcaat gagtctctca aagccatgag aatttccat 409

<210> 8585  
 <211> 409  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-049-Q1-E1-E4  
 <400> 8585  
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 gtttaggttg tttttatttt tcttaaatgc taatgtggat gcgtggactc tcgccggcct 120  
 tcgtggccgg ctgtaatgtt taattaatga tgttttttaa gtatgcatgt gttctatttt 180  
 tttctagagc cgtcaaaatg gataggccta gcgttgagcg cacgtgccga cccaaacacg 240  
 gaagcggaca tccgtgtccg cctattcgat ccaaacggac gaaaagcgga caaatcgct 300  
 gtccatttga gtcgatccgt tggagttgct ctaagggcct attcggtttc tctcggctcc 360  
 tgcgactcaa ctcccgaagc ggagcaagct acttcagctt ttttatgga 409

<210> 8586  
 <211> 368  
 <212> DNA  
 <213> *Triticum aestivum*  
 <223> Clone ID: LIB104-049-Q1-E1-F1  
 <400> 8586

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gatggagaag cgaatatgtg ctgcgggaag tggataggtg atgatgacta cagcatgccg 120  
cttgacttac gagacacata ccaacaacgt agtgtcatat cgatgctaga caacttgctt 180  
gagtgatcac agtactggta ctccctacag tacctactac agtactatgc cctagcttgc 240  
tagagtagag tagtagagta ggactctgct ctactactag caccggagga gtagtatatt 300  
ctaatactaaa atagttacaa acttcaatgc ccgatcgtgg aacgactacg aaccatgctc 360  
aaagaccg 368

<210> 8587  
<211> 423  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-049-Q1-E1-F12  
<400> 8587

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gtctcagatc tgctgctggg ctgatgctaa acggcggatc tagatgttcc cggcggcttc 120  
ggtatgttgc agcggcgggc ccggaggggc tctctccggc gagtacgtgg gatcccgctc 180  
gctcctccac ctctgctgac gacggccgac ggctctttgt gttgataatt attcgatgct 240  
atgtcgataa ttattagatc taagagatcg gaggtgacgt aaggtaagaa gatgtagcaa 300  
gcgagggtgct tgtggagagg tcggaggaga gtgaaaaaaaa agagatgtga acatctagag 360  
gcctttgcc a tgttgggtgc gctcgcatgg caggccgcc caataataaa gatgtttttt 420  
tgt 423

<210> 8588  
<211> 381  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-049-Q1-E1-F3  
<400> 8588

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ccctgctgcg caaaaatggg atatgcattt gagataaatg tccgagttag tacgagagtc 120

ggtgatcgat acagaggctg atcgagttag ctgttccttt acccaagaaa aagtatttcg 180  
 attttccatg tccaatcgca gatcccagaa tttctacaag aaattagata ggtagctaag 240  
 ctaatctagt tccctataca gcaatcgggt gtcattctac tgcaacagtt gtactgcaat 300  
 gatgaatacc ttaaagtagg tataaataga aagaattttg gcaaaatgga aaaggggttt 360  
 ctttcgaaaa gaagatgctt g 381

<210> 8589

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-F4

<400> 8589

gtcgacgggc cggccttggc ggaggagcgg gagcagcttg ctgaggagcg gaaggccttc 60  
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 cgagaaggcg agctgactca gcggaagtg aacctcgaca gccacgaaga ggagcttgcc 180  
 gcgcgcgaac gggcacttgg cgggacgctc caagaggcaa aggatgcggc tgcggctgcc 240  
 gaggccgcca agaaagaatt ggaggcaaag gtggcgcatc tagaagctaa tctgaaggtt 300  
 ggtggcgaag agcttgccgc gctcaagcta gagcgcgaga aggacgccct tgcccatggt 360  
 gagctgcagg gccgactcgc cg 382

<210> 8590

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-F7

<400> 8590

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 atttagtgct ttacgaaaga ttgacaagga caagatggcc atggcgttgg ggtccctgca 180  
 gacaagtaat ccaactatct caagtttcca gtgcacacag tccttgagtc attcatctga 240  
 attatcatgc ccttctcgaa tatcaacagg atctagccta ccttccaaaa ctactagga 300

actgtttggc attgagactg aatactgtgt ggccaaggct tcatgtgcc aggttagtca 360  
actggggaaa ccttcttcaa gtcaatccaa tgaagtctc 399

<210> 8591  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
  
<223> unsure at all n locations  
<223> Clone ID: LIB104-049-Q1-E1-G1  
  
<400> 8591

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gccgtctgta ctgtgtgcg gcccgctctgg tgggtgtccgc gatggtcgtg ccgaccgcct 180  
caaccgccat gacctccaag cccaacgcc acaacctaac caacgaagaa caacccttc 240  
ttggacttcc cctcctttgg cggcctcgct ttgacgcgcg aatttttcgc gtcgtcgagc 300  
tgatcttccc gggcaagcgt gatgctcaga tctccggca cctccgtcgg ctccatctcc 360  
gacacgttct ccgacggttc catgcgtcgg cgacggaagg aaggcgagag tgaaagaaaa 420  
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<210> 8592  
<211> 361  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-049-Q1-E1-G11  
  
<400> 8592

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cggatattctt gcctctttga cgtgcagttc tagcgcagca gaaggtttgg acagatacat 120  
ggttctgttt ctgctccggc agccaaagca aaaccacaga tacggtcctt gtacatctct 180  
aataatttga cctgaaataa ttacgatac tgcattctgta gtttctccac atattgtgcg 240  
agtaatgaca tttgtatact taaataagtg atggcatttc atccgtcaaa aaaaaacaaa 300  
aagataaaaa cataaataaa catacaaaaa aaatcaaaac tcttccaaaa tgaaagataa 360

<210> 8593  
 <211> 420  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-G12

<400> 8593

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 gttgaggtaa gcacgtgcac actgagaaaa cagctcgtgg acttcgtcga aggaccgag 120  
 ggtggtctca agagaacacc acgaactgtc gtttaaagca gccaaccgct tcgcggcatt 180  
 ggtgtgtgag acgttgatac gtctccaacg tatctacttt tccaaacact tttgcccttg 240  
 ttttggactc taacttgcac gatttgaatg aaactaacc ggactgacgc tgtttttagc 300  
 agaactgcca tgatgttggt ttatgtgtag aaaagaaaag ttctcggaat gtccctggaaa 360  
 tccacggagg cacttttttg aattaataag aatttttggc gaaagaatca agaccagggg 420

<210> 8594  
 <211> 304  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-G8

<400> 8594

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 cttcgatata tgcaagcata gaaccattga tcagtaactt catgcctagt catcagtggg 180  
 aaattcatgt ctgcaatacc tccacacaat cgctgagtat cattcatcac agcatactca 240  
 ggtatcacta catcagagtt gaaacataac tctgtccaat atcatcggtt ctaccgaatc 300  
 attg 304

<210> 8595  
 <211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-G9

<400> 8595

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cgccagaaat ccttcttgct gtctcttgag catacgttgg ttttcccttg aagaggaaaag 180  
gttgatgcag caaagcagca taagtatttc cctcagtttt gagaaccaag gtatcaatcc 240  
agtaggagac aatgcacaag tcacctagta cctgcacaag caatcaagaa ccttgcaacc 300  
aacgcgataa aggggttgtc aatcccttca tggctactcg caaaagtgag atctaataaa 360  
gatagtaaag taaatatattt ttggtatttt tgtagtatag attggaaagt aaagattgca 420  
aaatag 426

<210> 8596

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-H1

<400> 8596

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cacttgatc ttttgagctt gatagttttt gctctagtgc ttcacttata tcttttagag 180  
cacggtggtg tcttaatttt gaagaaattt ctagtctctc aagccttcac ttaaaatctt 240  
tttgagagtg ttttagaaca gcatggtatt tgctatggtt atacaattgg tcctagaatg 300  
gtaggcatcc aagttgggta taataaaaac tatcatagga agtgaattgg atgctatgat 360  
caatttgata cttgataatt gttttttacat acgga 395

<210> 8597

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-049-Q1-E1-H10

<400> 8597

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 tcctattctg atgcatagcc tacttttgta tctgctggtg taccttacct gcttatcctt 180  
 aactgcttag tatagggttg ttagtgatcc accagtgacc cccaccttgt cccagttgcc 240  
 ccgctttatg ttcgaagacc cgatcaacgg gatcgaagac caggccccgg caacgcacat 300  
 cactctcccc ttagttgctc gacactactg ggtaactacc gagtgccgag ggtgagacct 360  
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 a 421

<210> 8598  
 <211> 162  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-H4  
 <400> 8598

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 actggaacat agacgtggcc gtcgcgatga caatattgat caagtgggaa tgcaccacta 120  
 tgcctctatt agcaggccaa gaatgaatca gtggatcctg tg 162

<210> 8599  
 <211> 289  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-049-Q1-E1-H6  
 <400> 8599

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 atcaacactt aactacacat tcatattaga tatgaggctg tctgcattat cccatagatt 120  
 ccattaagct cacggtgcta tagagaataa tctgaggctg aacggataca taattcatct 180  
 tgagtctgat gacaggggac tgcactacac accactagca tcataactat gatgtggaac 240  
 agtatcctga ttaaactatt ttctggatta tgaatgaatt ctggaacat 289

<210> 8600

<211> 388  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-049-Q1-E1-H8  
  
 <400> 8600  
  
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 acggcattta ccgtataatt acaccattgc tgctgtcagc attgctctct aaatagacac 180  
 tgcaattatc atgtacatca ttgctgctgc aatgaaccat taagaattat ttaaaatcta 240  
 gcctaccatc tgcgttgctg tcaacagagg gttgaggcgg agttacaaaa tctgtatgag 300  
 aaaccgaggg attgtccgag tcagcgacat ctttgttatc ttcagagttg tcagaagcag 360  
 ctgagatggc gtcacctgat tctgaatg 388

<210> 8601  
 <211> 409  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-049-Q1-E1-H9  
  
 <400> 8601  
  
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 cggtcataat tgggatggag tctatgaagc tgaagaagct ccatggcaac ctaaaagtgg 180  
 caggcattct ctgctgcgtc gccggcgta cgggtgctggc cttctacgag gggccaatgt 240  
 tcagatcttt caaccatcac cggtcttcc agcaaggcag cagcagcagc tcctccggag 300  
 caggcaccta ctccaagaac cagtgggtat ttgggatttt cctcatgaca ctctccaaca 360  
 ttttagcagg cttgtggacc gtgcttcagg ggccactgat agaggacac 409

<210> 8602  
 <211> 391  
 <212> DNA  
 <213> *Triticum aestivum*  
  
 <223> Clone ID: LIB104-050-Q1-E1-A1



<400> 8602

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accattggta acctctctag tgcccgaac tttcgccgtt agcttaaacc caccatatac 180  
tttctctatc acagccacca tacctaccta ttatgacatt tgcatagcca ttccaacata 240  
tattaccatg caactttcca ccgttctgtt ttattatgac acgcttcaac attgtcatat 300  
tgcttggcat gatcatgtac ttgacaccgt acttgtggca aagccaccgt tcataattcc 360  
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<210> 8603

<211> 356

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-A10

<400> 8603

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cacggcgagg gccacaagga cgacgacggc cacggcagca gcagcagcga cagcgacagc 120  
gactgagcca gctccggccc cgctccggca gcagcgtgca gtgtaggcga gatcgatgaa 180  
cgcttggggag aagtgtggca tacatatatg ttgcagggtt tggagcgtgt ggtagcatat 240  
gtatgtaatg cgtgacatgt ctcatggatc ttgtgatgta taataattag ccggctgcac 300  
tgactgcac ggtgcttgta ataataacgt taatgaatca tgttggtatt gatgtt 356

<210> 8604

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-A11

<400> 8604

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tgagttgaga gaccgtaat tgctacgttt ccgaattgag aagcatccac tcgtctagta 120  
atacccttat ggaccagtgc ataccactgt ggcatttcgt attcatcata agcagtccaa 180

acctggtttt caataaacia agcttaagtc cgaatccgtgt cgaagtcgta aaaatcagca 240  
tatggaacac tcataaccac ctattatat tcatcctcat taaccatata actagtgttc 300  
ttgttttcat aaatctttac tctttttact gcattacata tctttaagtt ttgaattgtt 360  
tttgtaaacc agcagcacca actttc 386

<210> 8605  
<211> 269  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-A3

<400> 8605

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cgtctttctc ctgtccgac gatcccaagc ctgcacgggtg tcaactttcg ttagctttct 120  
cgtgtctgtt attaaataat acgatcgaat cgtggcctct ttggcatgta cgtactatat 180  
gatctatttt cagttatcga cttgctaattg ccggatgaat tgttctatct gcactctgca 240  
cttgggatta acctgtctt atgtttctc 269

<210> 8606  
<211> 396  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-A5

<400> 8606

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aaaaaaaaat atagaataga aaaatatggg aaaaaaaata aatccactcg gtttcagact 120  
tggtacaacc caaaaacacc attccttttg gttcgcacaa caaaaaatt attcgggaag 180  
tctacaggaa gataaaaaaa taagggtattg tatcaagaac tatatacaaa agaataggaa 240  
aaagggtctg aatagaaaaa tagaatcaga ctcaagttcc gaagtaatta cacataatag 300  
aaaaatggac tcaggttcaa gttccgaagt aattacacat atagaaatcc aaaaagaaat 360  
cgatacgatc cacgtcaaaa tccatattgg attccc 396

<210> 8607

<211> 403  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-A6  
  
 <400> 8607

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accttgctct gataccaatt gaaagtgcgt tatatcgact agacgggggtg aataggtgac  120
ttttatgaat tcttcactga ggaatttcag ggtgaggaaa ttcctaactg aagaactact  180
tgcagcggaa taagtactca gaatctatca taacagagca taagcatggt catcatgatg  240
aatgaaaaa caagcacaga gtacagaaaag tgtaaacaca ggatacacag gatgaagaca  300
aacagactga agaaaatgaa ctgaggaaat tgagaaagtc ttcagtcaaa gtcttcaaac  360
aatatgaac aagcacacag tacagtaatg aggaaatgga aga                        403
  
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<210> 8608  
 <211> 373  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-A7  
  
 <400> 8608

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atctttgagt gaactaagca tattagagct aacttatagc taacttatgt cattttggaa  120
gaagaagaag aagaagaaga agactataag cttattatgt aaacttggtc attttgtgct  180
aacataagta attttggagc taacctatag gaaactaaac atagtagaga taacttagca  240
tattagagct aacataggta actaagcata ttagagctaa ctatatatag atcattttgg  300
agatctgaca tacctgacat tgttcagttc tcattgttct tctccttctc cttcctcagc  360
ctgatgcgcc aag                        373
  
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<210> 8609  
 <211> 398  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-A8

<400> 8609

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gagcctaact aattatgccca tctttgagtg aactaggcat attagagcta acttatagct 120  
gacttaggtc attttggttag aagatgagga tgaagaagaa tactataagc ttagtatgta 180  
aacttgggtca ttttgtgcta acataagtag ttttggggct gacctatagg atactagcca 240  
taggtacaga taacttagca tattagagct aacataggta acgaagcata ttagagctag 300  
gtagatatag atcatttttg ggatcggaca tacctgacat tgttcagttc tcattgtgtc 360  
ttctccatct ccttcctcag cctgatgcgc caatagcg 398

<210> 8610

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-A9

<400> 8610

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cacaaaatat aaaaataaaa gatcaaaact cagaaactag cctattgaaa gtgtcttgac 120  
caaacttgag ttcaaagggtg tcaattctat ttaaagctaa gaaaaacgta tgcatttca 180  
atattcagta tccatcaaat tttggtctta atgatgcgtg gttttgagtg gaaagtttaa 240  
gatggactac tgttttgttt agtattattc ttacattcat ggattgtaag aaaactttaa 300  
tatctttttg ctctcacag ggataaaaaa gataaagaaa atttatctag aagaagggtga 360  
atgagaagggt gaata 375

<210> 8611

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B1

<400> 8611

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gtttcgttca agaatacatt gattgtcatg acatcaaacg ttggttctac atcaatttca 180  
aacggacgac ggaccatggg tttctcaaca gatgacaccg aatcaagccg atatgtcgcg 240  
gtgaaatccc tcgtgatgga agagctgaag ggattcttcc gtccagaatt gctcaacaga 300  
atcgatgaaa cggttgtgtt ccgctcctctg gaacagactc agatgctagc aattctcgat 360  
atcc 364

<210> 8612  
<211> 258  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B11

<400> 8612

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tataggttgg tatcatatcc gtcaagcatc aggtatgtta atgactgtcg ggagtgttcc 120  
ccccattgc atcagtctgt ttgcgcttgt gaatctgttc agcaggttca acgagcgatg 180  
ttcatcaggt tcaaattttg gtcacgtaag gtttgacaat attcagccat tttttaaatt 240  
catcagccga tattttcg 258

<210> 8613  
<211> 398  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B3

<400> 8613

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caatcccatt cactttcaca cggtatgttg tgtgtttag tctggtaata ttttgttcac 120  
ttcaatatca ggctgcaatg tatctaccta gccaaatggg gtggaatact taaattttac 180  
ttggtatatt tgtcagcaga tgtaacatgg aagggtactgg caaagtggca atatgattgg 240  
tgttttcttc acaaaggaaa atgatgtcca tctggcttca atgtcacagt tactctggaa 300  
gtctaattct tctgtgttct tgcagcacac aaaaaagga aaaaagaaaa agacaaagga 360  
aaaaataaaa aaggaagaaa aggaaaaaga aaaagaaa 398

<210> 8614  
 <211> 364  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B4

<400> 8614

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 gcagtacatc cagaccctcg agttctacgg cggcggactg ccgctcatct gcaccatgta 120  
 cgcattcttcg gagtgtctatt tcgggctgaa cctcaatccc atgtgtaagc ccggcgacgt 180  
 cgcgttgacc ctcatcccca ccatgtgcca ctctgaattc ctccccgtcc attgcagcaa 240  
 cgccaatgcc gggccgagcc accgcgacct cgtcgatcta gttgatgtga agctcgggtca 300  
 cgactacgag ctctgtggtaa ccaccttctc aggtttgtgc cggatcgtg tgggcgacgt 360  
 tctg 364

<210> 8615  
 <211> 417  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B5

<400> 8615

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 agtctgttct tcatacctat agtccacgaa aaagccaaaa aaaaattagg gttagttcat 180  
 cccatccgaa ccaatctgag ccttgcataa tcttttctgt atttgctttg ttgaatttgc 240  
 ggttgcatcg tcgtgttcag ttgctggtct tagcgtctag tcttttagag ttctgagttc 300  
 tgttcacaag ttgtcacgcc gtcgccgcac caccatcatc gccctgcca tctaccacca 360  
 ccgctctgaa tccgtatcca tataccacca ccaatccgtg gtcataaac aacaccg 417

<210> 8616  
 <211> 428  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-B8

<400> 8616

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tcttctgggt gctgaattat gtggcttaag tcgtcggcat ccggcggtcg cacgtaagtg 120  
ccctggaagt tgcgaggaa tgcggcttcc aggtcctccc aagaaccgat tgagtctgct 180  
ggcaagctgt tgatccaatg tcgggcccgt cctttgagtt tgagcgggag gtattttatg 240  
gcgtgtagat catcgccgcg tgccatgtgg atgtgaagga gataatcctc gatccatacc 300  
gccgggtctg ttgtgccatc gtatggctca atgtttacgg gtttgaaacc ctctgggatt 360  
ttatgatcta ttacttcatt cgtgaagcat agcgggtgtg cggcgctct gtattgggct 420  
atatcaca 428

<210> 8617

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-C1

<400> 8617

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cttgctgggt tcttatgggt ggggtctgag aattttgaca atgataagca acaaataact 120  
gtgttagtgg tggttggatt gaattttgat tctgaagggt ggaattgctt ggctgtgttc 180  
agatgagagc tcctttgcaa gtcctcttcc ggatagcagc tagagcttga atttcagagt 240  
gtggcactaa gaatgcttat aatgagtttt gcagacatgc ttgttgggta atttcaatta 300  
tttctcatgg gtatttgtcc cagggttttg actgtcaaaa cggtttctgt tattttgcct 360  
gttttcatca gtgtatactg aataaattgt aatgggaaaa cc 402

<210> 8618

<211> 390

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-C2

<400> 8618

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gctagttggg tgattatgaa ttcaaagaat gcttgtgttg aagttagcaa gtcccgtagc 180  
atgcacgtat ggttaaagtt gtgtaacaaa tttgaaacat gaagtgtacc tggcttgtgc 240  
atccttatga gtggcggtcg gggacgagcg acggtctttt cctaccaatc tatcccccta 300  
ggagcatgcg cgtagtactt ggtctttaat gacttctaaa tttttgcaat aagtatatga 360  
gttcttttga acaatgttga gtccatggat 390

<210> 8619  
<211> 414  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-C3

<400> 8619

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atgatggatg ccacagcaca cagcagcacc agcagtacag tgttgctgag cgaacgcgtc 120  
catgcatgtg cggaccatgc tctgcctcct ctgcttcagc gcccgcccaa gtgtcggcag 180  
cgccgtccag tccgagaaac atggatggat gaatgattgg ccacctttaa tcaatttgac 240  
actgttcaact cattcattag ccgtcgcttt ttggtacgtg ccaactgacac gtgcactgtg 300  
tacatgtatg ggcgaggacg ctcggcgcgt ggccggtggc gacggtgtcg gagcgcgagc 360  
ggagggcgac ggtggacggg ccggtgtgcg ggggctcgcc gttggcggtc accg 414

<210> 8620  
<211> 317  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-C4

<400> 8620

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tacgtacatc aatgctccct tggttaagggt tcttgcttac tttgttggca acccaaacc 120  
aggccatatc agacactgag cataagcact tcgccgtgta gatagataac agtgacagaa 180



tgctataaat aggtactata aaggagacaa ataggtttgt gttttcctta gatgacacga 240  
catgttcata ggagtggatt gcatagcatg ggttctaata ttccaccaat aatgagaacc 300  
taactttaat gattaac 317

<210> 8621  
<211> 219  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-C8  
<400> 8621

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aagtacacgg tcaggcacgt cgagctccgg tgaacatggg ttgctgtcgg ttatcctctt 120  
tggtgtatat gcttcgtcta cagagctact ttgacatgtt tcaagtccgc ccagtttcct 180  
gaacttgtgt ccatttgcac accgcgtccc tttggaaca 219

<210> 8622  
<211> 388  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-C9  
<400> 8622

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tttctactca tgattaatca agtggaccta gtatccgagc agatgacaca gttatgatcc 180  
acaagaagct caatagagaa gcaagcataa agggaagatt agtaagacca ctgagctcac 240  
ccgtttatga gaactttcga gccaatattt attaagcttg gagtaactta atttgccagc 300  
tctcatggca gagatagcat cattatccta aaataagcca aaagaaacaa cacatgtcaa 360  
tctacaattc ctttttagtt gaatttgt 388

<210> 8623  
<211> 375  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-D11

<400> 8623

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aaatattctt gcatttattg ctactgcact cttcattctc gttcctactg cttttttgct 180  
tataatttac gtaaaaaccg ttagtcaaaa tgattaattt gaataaaatt ttactatcaa 240  
aaaaaaaaaa aagatttcaa tttctcgtct taaatgaaag gaacgcatta gactcagtag 300  
tagtatccta aggggtccgc tagtatggta gaaagagatc tctttcaacc atactagcca 360  
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<210> 8624

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-D3

<400> 8624

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gccgccgtgg ccccgtgcc gttcccgac cacatgccgc tgccgcacca catgccgccg 180  
ccctacatgt tcaacgccga ctacatgatg aaccagtacc ggccggcgcc gccggcctac 240  
ccgccgccgt acgtgccgcc gcagcactac tacgtgcgga acatgagcat ggaggagaac 300  
ccaaactcgt gcgtcatctg ctaagtcaaa gtcgatccct cgatcgctcg cgtacgtacg 360  
ttccgtgggg cgaccatgca tgcattctgt tatagtagta tttt 404

<210> 8625

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-D4

<400> 8625

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aaagagatgg cgccccgagg ctccgtagaa agagaagaga agtggtgttg tatcgccaat 180  
ttttcgaaat ataccgtctg ctgttccctt ttttcccgcc ttgttgcctc ttttttttca 240  
ccttggtgtt tgactagacg gctcgaaata gacagaactc ttgatcgggg cctgtattta 300  
attgtgagat tctttgtagc gcagccggag tagtagaaca tggtgcggtt tttcgcagca 360  
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<210> 8626  
<211> 410  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-D5

<400> 8626

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acggcaagat ctgtgtgacc atctttttca acacctgtac attggatctt ggaggaccaa 180  
tcagtatgaa cgcgtcgtgt catcattcct cctgggtctac attatgcca gacatgcaaa 240  
gttgtggata gtctgtaagc taccatttgc tttcgtatgt cctatgtctg tgatatttgc 300  
tactaaacct attgtgctac gtgctctcta tgttcgtaca ttgttaggtg gtccttatt 360  
gtgtgcatac aaccaaacct tacttctgaa tgattcttca ttagtttttt 410

<210> 8627  
<211> 428  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-D7

<400> 8627

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aattatcaaa gtagcaaaca cgaattaagc caacatgatg aaagtgacta gatgaaattc 180  
ccgtgtaccc tcaagaacac ttgcttatc ataagagacc attttggcct gtccttttcc 240

tcaaaaggat tgggctatct ggctgcactt ttgttactac aatcgttact tgctcattac 300  
aaattatctt gctatcaaac tactctgcta cttacaattt tagcacttgt agacattacc 360  
ttgatgaaac ccacttgtct tttccttctg ctccccgttg ggttcgacac tcttacttat 420  
cgaaaaag 428

<210> 8628  
<211> 416  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-D8  
<400> 8628

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aagcgtgccc cgtaggggtc gcgtgaggat tgcccgagcagg aggaacgatg aggaggacgc 120  
caaggaggag ctctactcac tcgtcaccgt tgccgaggtg cctgctgagg gtttgaaggg 180  
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aatgagctgt tatttggaat tgcaccagca tgctttttgt atcccgaga agttttggag 300  
tatggaatat cgggagctat ctattttcct tcatctaaat cttgatgatt ggttttgtcc 360  
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<210> 8629  
<211> 374  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-050-Q1-E1-D9  
<400> 8629

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ctattctttt ttgaagactt tatgatccat ttgccgtggg tcccagcatc tatgtaggaa 120  
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catataattg ttgtccccta atataacaaa gatcacgaaa aggctcgaaa agtacattaa 240  
agtacaattt ggagtagaaa aaaaacaata gaagaatttc attttccttc ctcatcatt 300  
ggagagctct ctttgggctt tccgaaaagg tatcacatgt caagtttggc ctactgtat 360

aaaagttata aagt

374

<210> 8630

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-E1

<400> 8630

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atctgtctca aattggcttt gacgttgaag caattcaaca gatggtagct ggactggaag 120

agaagattga gttgcttgac aataaacagg atgcggctaa tgctggtata tggatatctct 180

gccgaatggc aggaggtata aaagagggaa taaatgccaa gtttttccaa gaagcggatg 240

aaaaactcaa gctcttgac ctggctcata ctgaaaagaa gccggtgaag ggtctggagt 300

tgtttctgga gagcaccaag gaagccaagg cactcgactc caagcctaag accatcgtgc 360

agaacgatgc caagaaaccg atgaaggcgt tcgacgtgcc tg 402

<210> 8631

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-E10

<400> 8631

acgggcctgg cactctctct ggaggacagg cgccatggcg gcggcggcgc tggcgcaggg 60

aactcctcgg gcgattcgcc gctgctcctg ctgccgatgc tggacgacga catctcccgt 120

gagggtccagc gtctagatgc tgatatggac cgcttcatca gggcccagag tgagcgcattg 180

aggcagteta tattggagaa agttcaggca aagcagtttg aagcgtggc ctctgttgaa 240

gacaagatcc tccgaaaaat acgcgataaa gagtcagaag tgcagaacat caacaaaagg 300

aacctggaac tcgaggacca gattaaacaa atggcagggg aagttggtgc gtggcagcaa 360

cgagctaa 368

<210> 8632

<211> 407

<212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-050-Q1-E1-E2

<400>       8632

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ttaggaataa gccaagcatg agtatgtgct catgtgtgtg atctgcatgc atggatggat  120
tagttagcta gctatggagc cggcgcagct gagtcgcgtg gcagttctgc gtggaggaag  180
aataggaagc aatagttgag gcttggctct atacgtgtgt atccaaagat tctggagact  240
tggtctgttac ccaagcgtgt gtagctagcc cgtggagtac taatcggatc aagcaaccgt  300
gggcttgacc atgcatgcgt gtgtgcgtgg ggtagtggg tgtgtgtgag tcttgtactt  360
ggctatataa gttgagtaaa tgaatgagaa aagccgccgt gaaggct                407
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<210>       8633

<211>       418

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-050-Q1-E1-E3

<400>       8633

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ttgatggaat ttggaataag gagtggaaag agctaagctt ggggatgccc aaggcacccc  120
accaaggtaa aattcaagga caacaaaaag cctaagcttg gggatgcccc ggaacgcac  180
ccctctttcg ttttcgtcta tcagtaactt tacttgaggg tatattttta ttcaccacat  240
gatatgtgtt ttgcttgagg cgtcttgtgt gatttgagtc tttgcttttt agtttaccac  300
aatcatcctt gctgtacaca acttttggag agacacgcat gaatcggaat ttgttagaat  360
accctatgtg cttcacttaa atctttttac ctaaataatt ttgccctagt gcttcact    418
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<210>       8634

<211>       57

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-050-Q1-E1-E4

<400>       8634

acacacatgc caagaggggtg atatcaaagt tttcaaattt tgggtaaaaa attagcg 57

<210> 8635  
<211> 254  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-E7

<400> 8635

acggatccgc caacggccag ccgaatcgac ggagaaggaa tggcttcaac caggggagac 60  
gtacgatggg agttcgccc cggcgaactg atacggagga tagtgtacgg cgaactgtct 120  
atgtctcaga cattgatcaa catgtcactg aacagaaact tgctgaggtt ttctcaaact 180  
gtgggtcaagt ggtagattgc cgtatctgtg gtgatccaaa ctcaagtatg cgttttgctt 240  
ttatcgactt cgcc 254

<210> 8636  
<211> 365  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-E8

<400> 8636

cggaagtctt aacaatcaag ggggtgtggc atccttgtgc tgctccatgt aaactcatgt 60  
aaattattcg gtagacgcag acgcagcagc tgtcgatgcc gttgtctggg ttcttggagc 120  
tacaaatttt tgccttccca cgccgtgcat ttgcatgaat tggagggaaa atttgaacag 180  
agctactgca tagtgaagggt tttgcatcgt gtatgtaaga tatccgatat gtgaaaatga 240  
atgcatgaaa gctctgcaaa ttgtgttgtc atgatttcca atatggtcac aatatccctg 300  
aaaccgtata tctgatttcc tgaattctca gtgttgagta taatgtttat ttaggaaaat 360  
ggaaa 365

<210> 8637  
<211> 363  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-E9

<400> 8637

atacaatgaa aaatgtaact aaattaaagt agttggaact tcaacccaaa gacaaaactc 60  
taaagtctct ttatcatttt ttttcattta tatgaaaaaa aattgataaa aaaatgcttt 120  
ttcgaaaaat aaaaacttct tcaaaatcct tagcaatttt aagataaaat tagattttcc 180  
taattgctca agagaaatca aaaaaattat caaaatattt tttttgatgt atctttttat 240  
attgtacaaa cataagattt tttgctcact taaagtaatt aatttcaaga tctttttatt 300  
cctcattaag aggaaataga agatcttttt ttaatactgt ctcaaggtag tgatgggaac 360  
aat 363

<210> 8638

<211> 360

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-050-Q1-E1-F1

<400> 8638

actttaccgc gattcaataa gagtcaaaat aagaattttt ttaagaagga ttacattatc 60  
tataaatata gaatttagat aaatatacac acacatctgg atatattcta gatcttcttt 120  
tttgactata tattatattt ttctgtttta acaaattcaa tataaaaaaa accgaacttt 180  
ttctattatc tattaatgtg tatctatccg taccgtaata ttttgaata ttatgaatta 240  
gataaattta catgctttct cattccattc gcgaggagct ggatgagaag aaactctcat 300  
gtccagtttt gcagtagaga tggaactaag aaagagaacc atcgactata accccaaaag 360

<210> 8639

<211> 386

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-050-Q1-E1-F11

<400> 8639

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atcgagccaa aatgtatact ataatctttg gctgtgttca acgaaagcaa ttatggacga 120  
gcgcggttcc ctcatattt acttaaatg tagatattgc tccatgtaag aatataagat 180



actgactata tattgactaa tgtattactc caatttaacg gaaataaagg tgacacatgt 240  
 actcaatcaa caagatgagt tattcataat gtaatgaaat gggacatatc aaaacttgag 300  
 tggtagagtt gctgcctctt aattacaaac agtttgaaag caacccctcc ttctaactaa 360  
 atctgatatt gctccttatt atagaa 386

<210> 8640  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-F2  
 <400> 8640

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 aatatggcaa atgtgaagtt atcaaagaca cactgttgg cataaaatcc tatgcaggta 120  
 ttgctgcgga gggatcggga agcaaagcgc tcttgatggc aatgaattac catgtcaata 180  
 catccaatag cgctttgtgg gatcacatgc caatggtttt ccacacctga cctgagccga 240  
 aatTTTTGCA ccgtacttcc gccatgtag gccgcgtttc atcttttGCT tgttctgata 300  
 gtatttcaac cctttttgtg ggaaaagctg atattggta gatgttgggt atagaagagc 360  
 catagaggga acctgacaaa gacattttcg gcagcacggc ccaat 405

<210> 8641  
 <211> 366  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-050-Q1-E1-F3  
 <400> 8641

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 caaggagctg accgagtcca gcaatggcgg cgagggtgc atgtaccggc cggctgctca 120  
 gagcaaccac cgccaaggac agccgtctgc catcgctcgc cccggcgggc agccggccgg 180  
 cgtgccgcat cccgtctctc aagtccccgt tcctgtggga caccaaggcg aggcaaggga 240  
 agatcagccg cgccgccgag cagagggcgg cgctgatcac cctgggagca tccagcgcca 300  
 gcaccacgga ggagaaacaa ctctgccgg gggaagcgag cagtgtagat ctctgctgc 360

ctctgg

366

<210> 8642  
<211> 424  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-050-Q1-E1-F6  
  
<400> 8642

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gacggcggcc tgagagacag acggctggga cccgcgccca gccggattac tattgtaccc 120  
tcgggggggta ggcctatata aaccctcgg ggcacccatg caaagggttc ggacctagag 180  
aggaagatag accagatagc ccaggagaga gagagctagc cttgctctct cccacctccc 240  
aaaacagctc caggagcacc attgtagtta cttgcttta gtgatcatgc ggagaccccg 300  
cagagcagca gtagggtgt tatctcctag gagagccctg aagctgggta agttccgcc 360  
gggtgcatgt cttgcctca tccgcttcc aggcaccggc gacgttctac tcgtcccaa 420  
catg 424

<210> 8643  
<211> 384  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-050-Q1-E1-F7  
  
<400> 8643

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gagagacaga cggctgggac ccgctcccat ccggattact actgtaccct cggggggtag 120  
gcctatacaa acccctctgg gcatccatgc aaatgggttcg gacctatata ggaagataga 180  
ccatatagcc cagggagaat atagctatcc ttgctctctc ccacctctca aaacatctct 240  
agtagcacca ttgtagttac cttgcttttag tgctcatgct gagaccctc agatcagcag 300  
taagggtgtt atctcctatg atagccctga agctgggtaa gttccgccag cgtccatgtc 360  
ttcgctcat cccgcttcca ggca 384

<210> 8644

<211> 431  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-F8  
  
 <400> 8644

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aacatttggtt attctttcga tggaccgggtc tcctcaccgt atgtgtacat ttacgtggg 120
gctttcttgc ttttttgtgg tggttaaaac ctgtgtaatt atgattatgt tgggtgtgtta 180
atgtgttggg catggtataa tcaggaactt gtgcaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaattaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaagcgg gccccccaaa agtttcaaac ttaatttacc 360
cttaaataaa atttaaaacc cctccaaaag tgcccccaaa ttcaaattca gggcccttct 420
tttaaaaatt t 431
  
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<210> 8645  
 <211> 369  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-050-Q1-E1-F9  
  
 <400> 8645

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ctcgtatcca gttacataac cgcaagggtg cgatgcccac gggcgacact cacacctcgc 60
tcacactcgg gacagcctag gcggatccat gctttccaac gaagcacgcc catccaacct 120
atgcgggtgg aatcgatgtc catggggaca tcgcgggtatt tcgtgcgcaa gacgactatc 180
ccgacaccca cacagactaa gataatccat gtcagcccat gccatgacac gccattcttc 240
ttcggcgacg aggtgaacag attcccgtgg ggacatctcg gtaatctcat gccaacaagt 300
tatcttccac cacccttagg cctcgaaaaa tccaggtcag cccacacatt aactcacat 360
tcttcgcag 369
  
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<210> 8646  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G1

<400> 8646

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acgccgagga gtacgatgcc caggacaagg agttgggttca gcttaagcgt gaggcccgga 120  
tgaagggtgg gttctatgtc agtcctgagg ctaagctgct gtttgttgtc agaatcagag 180  
gtatcaatgc catgcaccca aagaccaaga agatcttgca gctggtgcgt ttgagacaga 240  
tattcaatgg agtggtcctg aagggttaaca aggccacat caacatgctc cgcagggtcg 300  
agccatatgc tgcatatggg taccgaacc tgaagagtgt gagggagttg atctacaaaa 360  
gaagttatgg aaagctcaac aagcaaagga ttcctctgac caacaac 407

<210> 8647

<211> 234

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G3

<400> 8647

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ttggtacaat cttcgaaaga caggctctga tcaccctgca tctaactgtg ctgtcatcag 120  
ggatttattc caatctgttc cactgggcta atacagaact catgtgaacc tgctgtaac 180  
gttctaacct ttcttttagtc ttccttcgat tttaaattcc tctctctgcg tttt 234

<210> 8648

<211> 347

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G4

<400> 8648

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gacggttttc actacgccag tttggctagt tccatcaact cgctgggcag gactaatacc 120  
atcaagtcca aaaggccctt cagcctttgg ccgatctagc gaaactttat gaaaagtact 180  
ctggctcacc atgaaaggaa ttgcaaaatg cttcaaagta cccacgacc gtgtctacgt 240

agatgtttct acggcaggaa tctgatcgca ttgaccccaa acagctgcta acctgccact 300  
accacggcat ctttgaagta aacatccgcc ctttatacgg acctcat 347

<210> 8649  
<211> 229  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G8

<400> 8649

gaccggtcta cggatatct atcttcatca ttgtttaggg tatcgtgctt tcttgcagtg 60  
gttgagccgt gtgtcattac gattatattt ctctgttcat tggatctgtg atgtttatcc 120  
acacgctcat gtgggttcag atacatggat ggtctgagta caacgctatg tcaggaacac 180  
aacaactggt acagttcatt cataatgtac ttcttgtgtt tgctcaaaa 229

<210> 8650  
<211> 377  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-G9

<400> 8650

gaatatgaat gcatttttca ttcgctgaag agtatcaatg attgataata tacgagggaa 60  
gtgtaatgat tagaaagctg tatatgtttt taggcttatt tttaaaagga gagtaacata 120  
gaaaactact tagagggcgcac tgactcacac aaaaaaaaaa cttaaattcat ttttttttca 180  
atcaaccatg ttagtttggt agaaacttaa gtttaggtct tagtttaaca aacgcacgaa 240  
atttcgataa cattagatgt ttacatatt gttgtaccat ttacaaaaac tcctactatt 300  
actttgtaaa ctaaaatcca aaagaatcat ttacaattac cacattccga aaaattaaaa 360  
cttgcgatag tacaaga 377

<210> 8651  
<211> 389  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H10

<400> 8651

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tatgtgtgtc taggctcaag ccagaggccg gtgtgtgacc acgtctagct aagcgggagt 180  
agccgagagt cagtcaatct gtttgagttg gtcattgtagt gctatagtgt ggcgcgcggc 240  
cggacgagcc aatcatgcag atcgtgcatg catgtaggag tcagcgggta gtttagctggt 300  
tagtgcccg tggcggtggtg tgtgtggtgg ccagggttag tgttgtgctg gcgtctgtac 360  
tagaccgat ataaatcccc tgctgctgt 389

<210> 8652

<211> 176

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H12

<400> 8652

ttgacaggt aactgtacct gctcccttat tggaaagtgg tacatcatag aaaactgttt 60  
ctgtgacacc tacaccagtt agtgaggaag ctaaggatca tgatcatgac acttcagaac 120  
aggatactac tggaagctcg tagatcaacg agatctaaga tccgcaccag agtggt 176

<210> 8653

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H4

<400> 8653

ccacggactc ctgttcatcc agcctccact gcgcgtact ccaccggcta ctgttcaacc 60  
acccctccac gggcaccct ccaccctcca ctattcatgc agccctccac ggggtcgtac 120  
tattcatcca gtccctccacg ggtcctgtt catccagccc caaccggctc gatcgatcgg 180  
ggtcctgttc atcccgaggc aacgccaccg ctcatgttc atccaccctc cccccccgc 240  
aacgctcact gttcatccca gaggcagcat tgatcagctt ctgttagcag cagtagctaa 300  
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<210> 8654  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H5

<400> 8654

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gaggccacct tgccggggga accaatggct cgcaacacta cacgcggcaa caggctccag 180
ccctcgtcca acccaatccc gttcacatcc ccgactttct ctggggctat tatctcggct 240
acgagctggg ctttgatgat tgcgccaaac tggacgaggt gatagacgac gccatggctg 300
atatggcttg atgacgactc tggctctgat aggaaatgga tgaggctgca tgattctatg 360
catatatagt atcgaaggcc acgctctccg tgtttgtgat tttatttgcc cactgtttgt 420
gtggagtta 429
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<210> 8655  
 <211> 352  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H6

<400> 8655

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ggtacgtatt attattgtga tatcaacatt aggagggtca atggtcacag cgaatcttga 60
tatttgatg agcaagtttg acttttgcac gtaatcgagg ccagtgtggt gttcgaccga 120
cgaaggctta acgtgacgcg ccccaaaacta agtgcagatg ctaggatgcc gtgtgatgct 180
gcaaacacgg cgatatgccg atggtgatgc gtgagaagcg gcacgacgta tcagaggctg 240
gagccgtgat ggacagcatc aaattgggtc cgggtgaacca gacggtctta tcggtatgct 300
tggccagctg ttcaaacgta tgttccttca gtctaaccg atagtatcgt tg 352
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<210> 8656  
 <211> 246  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-050-Q1-E1-H7

<400> 8656

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aatcatttat aatgatctta tgtagggaat actatgtcta tttcatgaaa tgacgtcacg 120  
ggcgtatttc atatgatgtg ggctttaaga atccaaatat agttaagcgc tcatgggtgcc 180  
tgtgatatca tcctgacgct cccgggatat tcttttcctg ctgggtctga taaaaggtta 240  
cttctt 246

<210> 8657

<211> 270

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-A1

<400> 8657

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tttgactttt caaccacttt atgtgcactg gtgcatgtgc atgtagttaa aatttgaatt 120  
atgcacataa gtgcattgac aactcactta atgcataaaa atgtccaaac gaaccacgac 180  
gattctcaaa aaataacaca gcaactcatgt tgttctaagt tgataccgga aattttttta 240  
aagcaatatg aggcaatgga tatagtttcg 270

<210> 8658

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-A2

<400> 8658

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catttgtgct attcttcaat tgttccgagg aagagatgga aaggcgtctt ttgggacgca 120  
atgagggtag agttgatgac aacatcgaga ctatcaggaa gagattcaaa gtttttgttg 180  
aatccagttt gcctgtgatt gagtactatg acgcgaagga caaggttaag aagatcgatg 240  
ctgcaaaacc aattcctgag gtgtttgaag atgtcaaagc catttttgcc ccatatgcc 300



aggctacata gaacagtata aaggaccaca aaggtgataa atggaatgat ttcatacaag 360  
 gttttgctca agtgtgacta catatctgtg attacaaacc cttaatatag atcagactta 420  
 tcag 424

<210> 8659  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-A4  
 <400> 8659

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 aaaagagaaa ccgtgatatg agaggaatta aggacacata aaagctcaag cttgggggatg 180  
 cccaaggcac cccaagataa tatttcaaga agtctcaagc atctaagctt ggggatgccc 240  
 cggtaggcat cccgcctttc ttcttcaaca atcatcggtt agtatcggtt gagtctaagt 300  
 ttttgcttat tcacatgagt tgtgctatcc ttgcaatgta gttttcttta gctttgcttg 360  
 ctgtttgaat aaagtatcaa gatctgaaat tctttaatga gagagccata catgatttgg 420  
 aatttgetat aatactctat gtacttcact t 451

<210> 8660  
 <211> 427  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-A5  
 <400> 8660

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 tgaaacatga agtgtacctg gcttgtgcat ccttatgagt ggcgggctggg gacgagcgat 180  
 ggtcttttcc taccaatcta tccctctagg agcatgcgcg tagtgcttgg tttttgatga 240  
 cttctaaatt tttgcaataa gtatatgagt tctttcgact aatgttgagt ccatggatta 300  
 tacgcacttt tacctttcca ccattgctag cctcttcggg accgtgcatt gccctttctc 360

accttgagag ttggtgcaaa cttcgccggt gcatccaaac cccgtgatac gatacgctct 420  
atcacac 427

<210> 8661  
<211> 449  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-051-Q1-E1-A6  
  
<400> 8661

ggtaccggat aagcaattcg cgggccgacg ggttatatca ttttgagctt gatagttttt 60  
gctctagtgc ttcacttata tcttttagag cacggtggtg tcttaatttt gaagaaattg 120  
ctagtatctc atgcttcagt tatatatattt tgagagtctt ttataacagc atggtatttg 180  
ctatggttac aaagtgggtc ctagaatgat gaacatccaa gttgggtata ataaaaacta 240  
tcatagaaaa agaattggat gctatgatca atatgatgct tgataattgt tttgagatat 300  
ggaggtagtg atattagagt catgctagtt gaggtgatta tgaaaaatac ttgtgttaag 360  
ggttgtgatt cccgtagcat gcacgtatgg tgaaccgctt tgtgatgaag ttggagcaca 420  
attttattta ttgagtgtct tccttatga 449

<210> 8662  
<211> 398  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-051-Q1-E1-A7  
  
<400> 8662

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ccggcgccgg cgagaaggag ccggagctgc tgaatctttt tgtttaatga agctagttat 120  
taatctgcgc gttcattcac cgtagtagta ccgcgcgacg gaccgatcga tcgatgcgct 180  
gctcgctcgc tggcgctgga accagctgaa ctttttggtg gctccctct cgtcccaccg 240  
gcgacgcgcc ccttgattct tttttggcg tgcataaacc gccggctcgg tgtgacacgg 300  
agatgactag atgagaccgc cccggccggc tttgttcctt gtctactccg ataatagtac 360  
cgctgctttc taagcaccac cactactgct acaaagat 398

<210> 8663  
 <211> 451  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-A8

<400> 8663

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ggtaccgtac tacaattcgc gggtcgacac cacctatgga taggctatTT cctcgcgggt 60
cccaaatgtc agaatccaaa tctgtcacgg ccatgcagcc tttcctatga aaatttatag 120
cccatttgat gtgctggctc gaaataagtt tgtgggtgct ggtgggggct agtcacttgg 180
cttctgtaat gcacagtgag atcaagcagc cggcgagggt gatgttatTT cccttggttg 240
ggatttgTTa caatatttca ctcaaaatta aacaaatggc aagccatttg ccttggttca 300
aagaaaatat gacagtcaca gccgagttga aaagggcagg aacatctaac tccaacttac 360
aaactgtaca aagtacgag ggTTaattgt tcatcaggtt tacaaaaaaa ccagattgaa 420
aagggcaaca acatctaact ccagcactgt t 451
  
```

<210> 8664  
 <211> 403  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-A9

<400> 8664

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cagtggatatg aatatcagaa atgcgttaag agaattgaac gtgatgagac cgggcagaag 180
cactgtactg gccattactt cgattactgg aaatgcatct acaagcatgt tgctgagaag 240
ctctttgata gcttacaatg acaaggaaat tgttctctct agctactttt cactcaacac 300
tggttaataaa tagtatcatt tgcacgcctt atctgacaat tcaggctctt atcatcatat 360
atgtaaaaga aggttttgcc tgtcgggtaa cagcacagtt ttt 403
  
```

<210> 8665  
 <211> 295  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-051-Q1-E1-B1

<400>       8665

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gtgcatcaat gagagcttcg gtgggttcg cgacgggacc gggacattgt tcgtcaacat   60
ggctgacagt gttgtttcgc ttgacatcag gacgttgcc atggagagggc tatgtgttcc  120
gccactacg aacggagacc cctcggcgac ctctaccct acgagatggg ggcgtggccg   180
ccggagctca aggacctggg gaatcctccg gtgaatgcat atcgtggcac tgcgtgctga  240
ttactgtatc gtgtgttttg gtggtgtcag tgacaatgga actgctaagt tcagt      295
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<210>       8666

<211>       421

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-051-Q1-E1-B2

<400>       8666

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gacacggcac cagtagtcgg ccgcagtaca acgggggatc taccggcaga cacgggtcca   60
aagctactca tgcgcttagt agccaacaag cgggtcaaacc aaccaagcct ccgcccgtgc  120
agagcacggg aggatcactt gcacgaaggc gtcttgaag gccaaatcac gcgtgtcaca  180
ccagcagcaa taaagctacg gatgcaacga ttttccaaag gcaactttat cgggacatcg  240
gtgcaacggt gtcggacggt cttatcatgc acgaaacggg ctactttcct gtttcccag  300
ccgcattcgg ctgttgggtc agaatttcac ttgagacgta caggagaccg ggacagcgat  360
gacgttgcca ccgaggggca acgtttttcc ggaggcgaca ttggagggac atcgttgcca  420
c                                                                421
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<210>       8667

<211>       413

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-051-Q1-E1-B3

<400>       8667

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gaaattcacg atttgatgac ttggtgacca tagtacaaaa gtactatgcg atggagagcg   60
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cctggaaaac cgaaagtaaa ttttgggata atccggcccc gaatacatcc ctagtccaaa 120  
ataaaaggggt gcatcattac caagcacctg tgtaaacaac caaaaaacca aaaacccta 180  
aagggtacgg aaccgtactg gaggggtggc taaacggacc ctgcaaaatt catagcacag 240  
agggcgccac tccaactcac agccttcgag catgttggat actacggcag gtggccaaaa 300  
gtggcgaaaa gcttctagct tcagaatccc aaccagcaa caccagtaca gtgttaacag 360  
tcttcgaaac tttggcatca aattacatgc gaaaacaaac actccgcaac ctt 413

<210> 8668  
<211> 413  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-B4

<400> 8668

gggatatctg aacacaatct ctttattgca ttcagtgaag aaatctgttg cagaaaataa 60  
aatacgtacg tgtgcttgca ctgtcttcc aataatctgg tgtaagtttg cttaatctgt 120  
ccttttttaa tcgacaatgg atgttggcag gagcaactga cccaccacga tgctcagttc 180  
agtagaaaaa aaggatgctc agttcagtac agatctgttg tgattttgca aggcctactg 240  
ggggcaaggc acaaatgtat caaggggggtg tatgtaaaaa gataactgag ttgatcccct 300  
cccttgcatg cagatccaac acaccatggg gtcttggagc agcgtatcat gagatggacc 360  
gtagcactag atattttccc ctgctgtac accaagcaaa atcgaccttg gac 413

<210> 8669  
<211> 453  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-B5

<400> 8669

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gcgcccttagc aatcgctaaa ccaactccga gaggttattg accacgccgg agcacgatca 120  
acctgaccac gaggggtctgt ttctgcgag caaacgaaga acaagcaaga aactgagatt 180  
gcaatctgga tattgcgaat ataagatgaa agctttattg atcaaggtgg ggttctgtga 240

cgccctttgtc tggtcgttga acacaaacga agtacgcgaa gttgcagcta tggatgaactt 300  
 ttaatctaaa caaaacccaa agtctaaatg atgccctaag ggctgtatat atggaggaag 360  
 aggggggaat ttcgtggccc ttggtggagg ggtccgaaat caaccctatc tcttgtttcc 420  
 ccacacatac ggactctaaa aatagcctat act 453

<210> 8670  
 <211> 441  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-B6  
 <400> 8670

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 ccatccaccg tgcacaagat ccagagctgc tcggcggcat gatcgacgac ccacccgaag 120  
 aaccgccgtc accagtgtc atcgagagcc tgataccccc caaggaatgg gcagaggacc 180  
 tctgcggttc agtcaagaca aaggcagcat gtggcttcat cattgcctgc ggcggccgtg 240  
 tcaacgtcga tcccgatgat gtggtggcca ggctcgagcg catccttggc ggagttgacg 300  
 tccccgatga agtagaacat cgccaacatg atatcttgag gatgcaggtg atcgacggaa 360  
 tttgctacca agcgagagac atggaaatgg agcgggtccc cggagttgtc atgcgcgtga 420  
 ttgcacgcta tcaagctctt c 441

<210> 8671  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-B7  
 <400> 8671

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 aaggccagag cggaagtgtg ggtcacgaat ccttggggaga tcaagtctcc ccagacatca 120  
 gtgacgtagt ctaggttttc caaaactaat ctggtgacct gggaggtagc tgtcgatctg 180  
 ctccagatgg ccaagcgagt tggcccacag tgccaagccg ccgaacatga agatctggcc 240  
 ggggagaaaa acttcccccc ggacagcatt gttgtagatg attgacgggg ccatcaaacc 300

tcttgggtgac gacgcagcgg aactctcagt gaaagcacca gtctcgggtgt caaaaccggc 360  
 ggatctcggg tacgggggtca cgaactgtgc gtctaacgtc gatggtaaca ggagacatgg 420  
 gacacgatg 429

<210> 8672  
 <211> 340  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-B9  
 <400> 8672

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 ctccccacga tagatagggg tggagggggc tggtttcttg ccctccaagt ccactggggc 120  
 gttggcaaag gtgggggaaa gaaatcccat catttccctt cccacccgag ttgttatccc 180  
 ccttttttag ggatcttgat cttatccctt cgggatatga tcttattcct tcgaagggtg 240  
 gatcttgggtg caccttgacc agaggtgtgg ggactttccc ccactaccca cgttcaagtt 300  
 ggtectccca tgcaagttgg cctcacttcg taaccttcta 340

<210> 8673  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-C1  
 <400> 8673

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 cagtccctgg ccgtgctccc aacctgaacc gcaatatgga gagaggccac gccctgctct 120  
 atgctgattg cttttccaac aaactgttct tcaagccgga taaattccga cgccgttttc 180  
 gaatgggaag gcatgtgttc aatcgtatcc gaaagggagt ggttgctcat gaccatact 240  
 tcgagtgoaa gatggattcc cttggcgagc ttgggttctc ctcttgccag aaatgcatcg 300  
 cggccgtccg catgcttgcc tatggaattc ctggcgatct ggtggatgag tacgtgcgta 360  
 ttagcgaaac aacatgtctg atgtcaatgt acaagttttg tcaggttgt 409

<210> 8674

<211> 429  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-C2  
  
 <400> 8674

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ggatagttca catatctgca tggatagttc agaaacacta gtcattttca ttcattctctg  120
catcagcatg atagcactca agttcacatt gacagcacia catgggggat gctccagtat  180
ttcaaaataa aagagaggaa aaaagggaca tgccccagca tgatacatgc tccagcttgg  240
gctccacaaa agataaagta catgggttaac agcatcttgc tgttttctagt tacacaaaaa  300
tgatgtagcg catacatttg tctacaaaaa agcagtctaa aactatctag gaaacacttt  360
gctccaattg acatcttcta agaactactc agcagtttct gaaactcttc ggctgagttg  420
agtgtgttt                                     429
  
```

<210> 8675  
 <211> 387  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-051-Q1-E1-C4  
  
 <400> 8675

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aggctgggag acgaatgagt gattcctcgg acatccatga attacatatt agcacctgca  120
taatcgagaa agcagattac aaataatggt agaactctgaa cgaattaaga agatgtgggg  180
aggggggtgg cagagaagga cgacggtggt cgtcgcacga cccgtgatgg atgagctcca  240
ccggcgacgc ccatgacctc cgaagaaggg gtggaagagg gtcgagcgga gctgctcgcc  300
ggggaaggga aggcagctgg ccatggaagg gagaggattg ggcggtggga tctagatcaa  360
gatttatttc tttttctaag aacatct                                     387
  
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<210> 8676  
 <211> 411  
 <212> DNA  
 <213> Triticum aestivum



<223> Clone ID: LIB104-051-Q1-E1-C6

<400> 8676

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gcgacggcca cggcgacggc aagaaggacg gcgagcacia ggagaagaag gacaagaaga 180  
agaagaagga caagaagcac ggcgagggcc acaaggacga cgacggccac ggcagcagca 240  
gcagcgacag cgacagcgac tgagccagct ccggccgcgt gcagtgcagg ggagatgaac 300  
gcgtgggtta atttgagcg tgtggtagca tatgtatgta atgcttgaca tgtctcatgg 360  
atcttgtaat gtaataaccg gctgcactgc atggtgcttg taataataac g 411

<210> 8677

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-C7

<400> 8677

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actgaacgca caatattgaa agggctgaaa taaattcaga aaaatatgag caccaacgtc 120  
aaataaagtc tgacacttaa actctattcg gctgaggata ccactgtcct cataaccatc 180  
caaccacagg ttaatttgtt ttttctttct ttttaaggata cataatttgt ctgatgagat 240  
tgattttaca acacttgctg cgttaattaa caagctcgag aaaaacacat cagatgaacg 300  
agtaataagt gggcaggcaa cataaaacaa gaaatgcaaa ttgaccatag ctgagatggt 360  
tatgtttctt gtggtggaac caactcatta gaatttaagt ccttgactta gtatcggcgg 420  
tcgcattttt ctgaa 435

<210> 8678

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-C8

<400> 8678

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ccatacggaa ctcaaaatat tttccggaga tattcatttt cctgaagagg cggataagat 120  
attaggtggc tgtttgatac cgccagaaag acaaaaaaaaa gattctaagg aatcaaaaaa 180  
aaggaaaaat tgggtctatg ttcaacggaa aaaaaattct caagagcaag gaaaagtatt 240  
ttgtttccgt tcgccctaca gtggcatatg aaatggacga aggaagaaat ttagcaacac 300  
ttttcccgca agatctcttg caagaagaaa ataatctcca aattcgactt gtcaatttta 360  
tttctcatg 369

<210> 8679  
<211> 369  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-D1  
<400> 8679

cggtaataca agtaaattaa attacctcat cttggagctt agtttgtttc tttaaagcaa 60  
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tttgttaaac ctctatttta ttttattact aaaaaggcta tgaagcttga gcatcatagt 180  
ttgcttctca gggttgaatc atgttggtgc tatgcagtag gtatgggtgc caagaagcac 240  
tacgggaaac tgcaagaac actattaaaa ttctttgggt gggtgttgat gtcttgagag 300  
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ttggaggaa 369

<210> 8680  
<211> 403  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-051-Q1-E1-D3  
<400> 8680

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tgaggaggtac gaacaggatg atgagtacaa gaagaagccc agtggtggtg ggaggtatga 120  
agaggatgac gagtacagga agaagcctac tagcgggtgt ggccggctac gaggtggaag 180

gtatgaggga gaagatgagt acaagaagaa gcctaccagt ggtggctatg gtggggggag 240  
 gtatgagcaa gaagatgact acaagaggcc ccctagtggg ggctatgggt ggggaaggta 300  
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 gagatacgaa gatgagtaca agaagccaac cgggtggccat gct 403

<210> 8681  
 <211> 424  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-D8  
 <400> 8681

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 cataaagatc atggtgctac tttgaagcac aagtgtggaa aaaaggatag tagcattgtc 120  
 ccttttttta ttttttattt ggcctttctt ttttcttctt tttttggcct ttatctttat 180  
 tttatttggg acaacgctct attactgatg atcatcacac ttctatttat ttacaactca 240  
 aagattacaa ctcgatacta taacaaagta tgactctata tgagtgcctc cggcggtgta 300  
 ccgggatggg caatgaatca agagtgcacat gtatgataaa ttatgcatgg tggctttgcc 360  
 acaaatacga tgtcaactac atgatcatgc aaggcaatat gacaatgatg aagcgtgtca 420  
 taat 424

<210> 8682  
 <211> 390  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-051-Q1-E1-E1  
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 cgaaacattt caacgtgtac aggtcctgag agtgagtgat tcacaagggtg gaagatcgtg 180  
 atgatcggct gaacacaaag tctggttacc agtttgacca caatgtgatt cttggttggtt 240  
 ctttctttgc actcttacia gcatttcaag gaagtgtttg ttaatcttta catggctttt 300

gttgtgggtt cagagtccat ccatgttgtc caatatgtgt gcaaaagctt ttctttctgc 360  
ccttgctcgg tgtgttttgc atttgtgtgt 390

<210> 8683  
<211> 423  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-E3

<400> 8683

ccatcgacga cttcgtctcc ggcgccaccg tctatggcta cagaggaaag agcattaagt 60  
ctgccctcat cgggtggttct agcctggcat tcacatctgc cattctggac gttggcggtta 120  
acactaccag agtggacaat ggcaaagcgt accatgcata cacaacggaa aagaagccccg 180  
agcctgcgca ttgatcaagg ttgtctactt gtagcacaaa tcatgcaaac cagctcgggtg 240  
aatttttgag ctgatgtgtg ctgttatgtc tgttttgctg atgcacctag ttcctttgca 300  
aagctgtagt aacttgtttt gctcgagggc aatacaacag acctggaata aatatcttgc 360  
tttattttgc ttcattcattg gttacgataa taatcacatg tgacacaata ttgttaccct 420  
aac 423

<210> 8684  
<211> 360  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-E4

<400> 8684

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ggagagagag agggagatct ccaaggctgc ggccatggcg atgcgtgcgc tgtacaacga 120  
gatccgcgcg atgaaggggtg cgcgaggtgc ccgcgtacct caagccgcgc ctcacctggg 180  
cgaacgtgaa gaagagcacc gaccaggcgg tggaccgcta catcgagaag tacatcgaga 240  
ccagctcggc tgaccgcgtc ttccacatct gttcggcgg catggccttc tcgtacctcg 300  
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<210> 8685

<211> 426  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-E5

<400> 8685

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ctctaaaaat tcagagtatt tagatcttaa tgatgaaatt gatgaaagtg ggattgaaag 120
aaataaaaaat ctagatgcta aaccactat attggatttc aaggaattta attatgaaag 180
ttgctcttta attgagtgtg tttccttggt gcaatccgtg ctaaattctc cacatgctta 240
tagtcaaaat aaagccttca ccgaacatat tgttgatgcc ttgatgcaat cttatgaaga 300
aaaacttgag ttgaaagttt ctatccctag aaaactctat gatgaacggg aaccaactat 360
taaaattgaa attaaagatc atgagtttta tgctttgtgt gatttgggtg ctagtgtctc 420
tactat 426
```

<210> 8686  
 <211> 422  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-E6

<400> 8686

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ctcttcatgg atcacaaca cagaactcag ttcctgagga cggtttcaag gagacaaccc 120
accatgtact cctacatggc ctctcacatc tacctttacc aaattgagtt cacacgctta 180
gccctcaata gtagaacatg ttcacacgcc tccaattcat ccccgatgaa tcagacctaa 240
ctcaactcta agcagtagca ggcacgaca acaagcatga atgagtaggc acatcagggc 300
tcaaacaact cctgctcatg ctagtgggtt tcatctatct actgtggcaa tgacagatca 360
tgcagaggaa aaggggttca actactgcaa catgtaacag ttgaatcctt gttgtcctaa 420
tg 422
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<210> 8687  
 <211> 442  
 <212> DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-051-Q1-E1-E7

<400>       8687

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ttgataattg ttttgagata tagagggtgt aatgttagag tcatgctagt gggtaattat  120
gaaattgaga aatacttgtg ttgaagttgg caagtcccg agcatgcacg tatggtaaaa  180
gttatgtgac aaatttgttg catgagctgc tcttttaatt gtcttcctta tgagtggagg  240
tagggattgc gcgatgggta actcctacca acccttcccc taggagcatg catactagta  300
ctttgcttcg agggcaagta gacttttgca ataagtatat gagttcttta tgaccaatgt  360
gagtccatgg atatacgcac actcaccctt ccactttgct atcctctatt gtaccgcgca  420
actttcgccg gtatcatgca cc                                           442
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<210>       8688

<211>       431

<212>       DNA

<213>       Triticum aestivum

<223>       Clone ID: LIB104-051-Q1-E1-E8

<400>       8688

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gaggagatc tccaaggtcg cggccatggc gatgcgtgcg ctgtacaacg agatccgcgc  120
gatgaaggtg cgcgaggtgc cggcgtacct caagccgcgc ctcacctggg cgaacgtgaa  180
gaagagcacc gaccaggcgg tggaccgcta catcgagaag tacatcgaga ccagctcggc  240
tgaccgctc ttccacatct gcttcggcgg catggccttc tcgtacctcg tgggcctgcc  300
ccaggagcgc cgccacctcg agcacctcga gaagcacggc ggccactaga tccggatccg  360
cctcgcgcaa gagagcttat ccacggttga ttcaggatgg tgttcccat ttttcttcca  420
ctgatgggct a                                           431
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<210>       8689

<211>       375

<212>       DNA

<213>       Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-E9

<400> 8689

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atacacttca catggatgaa ctgtttgcga ttagccacaa caaacagaaa cagtttagaca 180  
catcaacgtg tgtgcgctag acgggcacac attctaatta aaagaagtgt gcgcgatggt 240  
aataacgagc gcgcacggtt gttggaacaa gacgtgtgct gacattgcct attacagtgc 300  
accatatggt gcaaacgcca cgtaggcggc cgagaaagcg tgcccatggt acgccttccg 360  
ggaatagtgc tgcac 375

<210> 8690

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F1

<400> 8690

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ctaccttacg ttccgtttgt tcggctaggg tagtaaaggg agaactactg cggttgtggt 120  
tatggttcat ctagtcaagc acctcagtag agaaagccga aaactgactg tcatgatgcg 180  
gcgagagctg gtcagccatt cggtgactta ctaaactctt aacgattttt ccgtttttaa 240  
cgaaggacta tttttccagt catatacata acgcatccgc attcgaatag ccgcatacat 300  
accaggggct attttatagc cccatcatca aactcctatg gataagtgag agccgtaaag 360  
ccgtatagtc cgattgcctg gttcgacgca ctaacacctc cgtcacgga 409

<210> 8691

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F10

<400> 8691

ttccccggcc gacgggactt gtgattaaag tttgtgattc ccgtagcatg cacgtatggt 60

gaaccgttat gtaacgaaga cggagcatga tttgtttatt gattgtcttc cttatgagtg 120  
gcggtcgggg acgagcgatg gtcttttctt accaatctat ccccttagga gcatgcgcgt 180  
aatactttgt tttgataact tctatatttt tgcagtaagt atatgagttt tttatgacta 240  
atgttgagtc catggattat acgcactctc acccttccac ctttgctagc ctctctaata 300  
ccgcgcactt ttcgccagta tcatacacct accatatacc ttctcaaaa cagccaccat 360  
acctacctat tatggcattt ccatagccat tctgagatat attgccatgc aacttttcac 420  
catccaat 428

<210> 8692

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F11

<400> 8692

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gaaccgttat gtaacgaaga cggagcatga tttgtttatt gattgtcttc cttatgagtg 120  
gcggtcgggg acgagcgatg gtcttttctt accaatctat ccccttagga gtatgcgcgt 180  
actactttgt tttgataact tcgatatttt tgcagtaagt ataggagttt tttatgacta 240  
actgttcact ccatggatta tacgcactct cacccttcga cctttgcgag cctctctaata 300  
accgcgcact tttcgccatt atcatacacc taccatatac cttcttcac agagccacca 360  
tacctaccta gtatggcatt tccatagcca ttc 393

<210> 8693

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F2

<400> 8693

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cttctcgggc gaggaatgca acgcaaagag ccaaatcggt ggggtgtttg gcgctctccg 120  
tgtcactgat gacctgttga tgaggagggc gtattttagg aagcagcagc ttgacaacaa 180



aacaacatca cctaactcta actgaagagg acagccggtg tgatttgctc ttacattgat 240  
accgcatgcg tatgaataat ggtccaatgg aattgggagc ggagtaagaa gctcatgttg 300  
cctttatgca tgtaataatc atgcctgcct gcatggcccg ctagctgttg gtccaatgcc 360  
tggctgcctg cctgaactgg cgtcaatttc cagtttgttt ttgtaatata taataactc 419

<210> 8694  
<211> 421  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F4

<400> 8694

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ggattacatt atctataaat atagaattta gataaatata cacacacatc tggatatatt 120  
ctagatcttc ttttttgact atatattata tttttctgtt ttaacaaatt caatataaaa 180  
aaaaccgaac tttttctatt atctattaat gtgtatctat ccgtaccgta atattttgga 240  
atattatgaa ttagataaat ttacatgctt tctcattcca ttcgcgagga gctggatgag 300  
aagaaactct catgtccagt tttgcagtag agatggaact aagaaagaga accatcgact 360  
ataaccccaa aagaaccaga tttcgcaaac aacatagagg aagaatgaaa ggaaaatcct 420  
g 421

<210> 8695  
<211> 358  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F6

<400> 8695

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aattaacgag acacaaaggt tcaagcttgg ggatgcccaa ggcaccccat aatcatattt 120  
caciaagttt cagtcatcta agcttgggga tgccccgtta ggcacccac cttacttctt 180  
caacaacgat cggttactat cggttgagcc taagtttttg cttcatcaca tgagttgtgc 240  
tattccttgca ttgttactct attttgcctt gcatcatctt tgcataagat accatcatgt 300

caaattcttt aatgaaatag actctttgca taggttcaaa actatttaac ctcccttt 358

<210> 8696  
<211> 415  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-F8

<400> 8696

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ctacgggaac ccgctgggga tctgcgga ctacacggtg ggcaaagcc acacgcccac 120  
ggccaaggag attgtggaga aggcgtgctg gggaagagg agctgctgctc tggccgtgctc 180  
gcacgaggtg tacggcgggg acctcaactg cccgggcacc acggccacgc tggccgtgca 240  
ggcaaagtgc tccaagaggc agaggaccgc cgagcaataa gtaagctaag ctacagatatg 300  
tactgctatg tagatcatct catcaccttc acctttgccg accatggact ttttcaggct 360  
gcttgttttg gatgctgca tacgtgttgt actttgttga gtctgtgac ttgtt 415

<210> 8697  
<211> 398  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-G1

<400> 8697

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acaagacttt cccaagtct tccaatggt tctacttggc acaaacta attaaacaca 120  
aaaaacacaa ccaaaaaaga ggctaaataa tttatatatt aggaacagg agcaaaaatc 180  
aaggaataaa aataaatttt ggttgctcc aaacaagcgc tatcgtttaa agccgctagc 240  
taggcataaa agcgaggata gatctaggta ttgccatctt tggtaagcaa tccataagtg 300  
gctctcatga tagtttaata tggcaatttt atttcatttc caggaaagtg ttccacaccc 360  
tttttaatgg aaatttagat cgaacactcg cttccttc 398

<210> 8698  
<211> 353  
<212> DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-051-Q1-E1-G10

<400>      8698

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acgaattaca agacatggaa agataagaca acgaaaacat tgttacaaag cagacatata    120

gtttcaaata aattaactat tgaagctaata gtgccccaaaa gaatctagga gtataactac    180

ctacttcaaa ggcataattta tacagttctt ctacatttta tactatcccc tgcgaaatgca    240

tgggttgacg actagtgaga gtaactcttc agctcataca ttgggtcactt ccccttcatg    300

cttatcgaag gatgaatggg atgatgattg ttatgatcat gttgattctt ttg            353

<210>      8699

<211>      446

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-051-Q1-E1-G6

<400>      8699

attcgccggc cgacggggccc aacaacgcgg ggagaagcgg cgaccccacc cccacaagag    60

cccaggaacc cgtagaatct cgagtggacc acatcagcga tctctcggac tccgtccttg    120

gggagatcat ctgcgttctc cccaccaagg attgctgccg caccacaagtc ctctcaattc    180

ggtggcgccc tctatggcgc gctgtgcccc ttaatctega ctgtcgtcat ctagctctct    240

tcaatgattt tgaaatcccc agagccatca tctcctccca ccagggtccc gttcaaagcc    300

tctacatccc gccttctacc tgagcaagca tagcatgccc tgcattggtg acgcctggct    360

ggaatcccct gaattcacag aactacagct gcttgagttc tactattccc ctggaaatca    420

cataccacat accgaatgcc atgaac    446

<210>      8700

<211>      433

<212>      DNA

<213>      *Triticum aestivum*

<223>      Clone ID: LIB104-051-Q1-E1-G8

<400>      8700

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 taagtctaag gagaagcacg ctaagcaact agaacatcct aatgccggtg aaaaatcccc 120  
 ttcccgaaaa caagtaaagc gctctggaat aactctaagt ctaatgagaa gcacgctaac 180  
 caactagaac atcctaatgc cgggtgaacaa cccctttttc gaaaacacat taccacaact 240  
 ctggaatatc actaagtcta aggagaagca tgctaattag ctagaatatc gtaatgccgg 300  
 tgaacaatcc catTTTTCAA atcaaagaac atcagctctt gaatatctct aagtctaagg 360  
 agaagcacgc taaccaacta gaacatccta aaccgggtga acaatcccc tttctaaaac 420  
 actttcacac cag 433

<210> 8701  
 <211> 353  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-H12

<400> 8701

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 agtacgacgg tggctgcaac cgaggctact accacagggc cttccagtgg atcatggaga 120  
 acggcggcct caccacggcg gcgctctacc catacaaggc ggtgagaggc gtctgcttcc 180  
 gcgccaagcc cgccgtcacc atcaccgggc acgcggcggt cgccaagaac gaattggccc 240  
 tccaaagcgc cgtcgcgagg cagcccatcg gcgtggccat cgagggtcccc agcagcatgc 300  
 agttctacaa gagcggcgtc ttctcggccc cctgtgggta tcagatgacc cac 353

<210> 8702  
 <211> 419  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-H2

<400> 8702

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 gccgataatt ctctcaacat gattccgaag ttgagcatgt cgaagattaa ttagttccct 120  
 gtgattttgt ggcttttgac gaactcttcc ttgttcgttt aaatgatacc tagtaccacg 180

gtatggagca agaaactgtg gtgtgtttgc ataatcagca tccacgagat aaaatttacc 240  
 atcggaact tcaaaacat ggttaagtgc atcatctaga actcttgc atgaagctga 300  
 tccctcccaa ccaggatgta tatgcacaaa cttcaagtca aaatctcagg caaccataac 360  
 attctgcgag attgtttgcc tcctatttct gtatggttct tgctcatcca atggaagct 419

<210> 8703

<211> 446

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-051-Q1-E1-H3

<400> 8703

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 atcatcatca ttagcttccc cactaattgg tgtangaatc actggaactg atttctgtga 120  
 tgaactactt tccaataagg gagaagggtgc agttacctca tcaagttcta ctttctccc 180  
 actcacttct ttcgagagaa actccttctc tagaaaggat ccattcttag caacaaatat 240  
 tttgccttcg gatctgtgat agaagggtga cccaacaatt tcctttgggt atcctatgaa 300  
 gacgcacttc tccgatttgg gttcgagcat atcaggttga agctttttca cataagcatg 360  
 gaagcccaa actttaagaa acgagaactt tggtttcttg ccaaaccaca gttcatatag 420  
 ggtttaatgc gttttctgag actaac 446

<210> 8704

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-H8

<400> 8704

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 gggtcgacct ccgcgacga ggtgcagcgc atgatggcgg agatcgacac cgacggtgac 120  
 ggcttcatcg acttcagcga gttcatctcc ttctgcaacg ccaaccccg gctcatgaag 180  
 gacgtcgcca aggtcttctg aatcagttca tttcacctca gccgtccgat ccaggagccg 240  
 atccatctac gtacggcttc gtatatcaat ttcattgcaac tacctactcc ggtcccgatc 300

cagcctcagc ttcacctgag gccggcccta attttgtttg atcatttttt ttgctaccag 360

tagtaactag tgatgatcac tgttccatca tttatttatt ttatatcatc acaagtttct 420

<210> 8705

<211> 106

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-051-Q1-E1-H9

<400> 8705

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tggctactgc ggctcactga gggtaacacca ctggtctgca gttttc 106

<210> 8706

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A10

<400> 8706

cggctctagag attcccgggc cgacggggag ctaattccgg tacatgggct ccctcacggc 60

gccaccgtgc gccgagaacg tctactggaa cgtcctgggc aaggtgaggc agatgaccaa 120

ggagcagatc gacctcgtca ccgcgccgct gccggccgcc gccaaagcaga acgcccggcc 180

ggtgcagccg ctcaacggca gggtcgtcac cttctacaac ccgcccaaca gcaccatctc 240

cttcgacatg tgatcttacc cccattagat ggagtgctaa ttaacctaga aattaacgtg 300

ttactgtatt cgtgtatcac catcagcgta ctgaccagct aatctcgttt ttgccttgtc 360

attatctctt cgctgcttta ctcagatgaa acattgtgac 400

<210> 8707

<211> 398

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-052-Q1-E1-A11

<400> 8707

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ggaggctttg cagcacgcat gatcttgcca gttctatcgg tggctcttct cgtccttgtc 120  
agcgttggga tctatggatg ggcataatag ctctctttat ggtgggattt aatgtgtcac 180  
atcccccca catcggctgt gatcattgta catactgtgt cttgctgcct gcgtttaaga 240  
cggttgtaag acagcgaagt gtttgttccc cttcgggcgg gggactgtga aatgaagaag 300  
tgaggtaaca aatgagaagc gggatgaagc aaggagcaac tgttgctgta natgcctgtg 360  
acttagtaca tgctagtttt tgttttcctg tcatcaca 398

<210> 8708  
<211> 439  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A12

<400> 8708

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gatatgtgca atcttggagc atcttttgca tttagttttc atttttcttt tatgcaccat 180  
gctggcatga gatagtcctt ggttgattta tagaatgctc atttcacttc acttatatca 240  
tttgaagttt ggatttcctg tttctcttta catagaaaac cgccatttgt agaatgttct 300  
tttgcttcac ttatatattgt tagagcacgg gcatatcttt tgtagaaaga ataaaactct 360  
cttgcttcgc ttatatctat ttagagagat gacaggaagt ggtcattcac atgattagtc 420  
ataaaatcct aacataaac 439

<210> 8709  
<211> 391  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A3

<400> 8709

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tcaaaggatc atatgatctc aaaacaataa tgggctctgc attgctcttg tcaatacctc 180  
tctccctttt gccttgtgac gctgtactta attaattact atttaattat gtatcatcag 240  
tctgcacctg cgcttcatta acctttgttt ctccaatat tatttgatct atatttactc 300  
tttgcaaaat gtacaataat ggcaacgctt ataaagaatt ttctttgggg aatttattga 360  
attatccttc catcaacaat gagaagggt t 391

<210> 8710  
<211> 419  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A5

<400> 8710

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ttcatgggct tttattatgg catttttaaa tcctttttaa tgtgtataca agctgagatt 180  
ggagggggag gggggcaact atgcttgtac gtgtgattta tctctctttg tgcgcaccga 240  
ttcgaagtat cagtcgatgg ttggggggct tggccctgc ttgtcccccc ttgctccgcc 300  
actgggaaga cccatgtgtc acgataattt tgtagatga tgtacaactc aatcgtctat 360  
tcaccagagg tgtatcaaata agttgtatt tgtctttgtt ctcttgacg ggtaacacc 419

<210> 8711  
<211> 436  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A8

<400> 8711

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ttttcggtag caaacagttg tgttttgaac tagagaggat acaagatgct ctttgtgggt 120  
ctccaagta caagagtgc aatggagagt tcctgggtat tacttctgat cttgtgagc 180  
attggaagct tcaacaaact gcaatgtcag gattcctgat agagattggg tggtaataa 240  
agaagccttc tccagatgaa tttaaaaatt tactgagtaa aacaaatgtt aagagatgga 300



tatgtgtgtt ggagttcttg atacagaaca attttatcaa tgttcttgaa atgattgtga 360  
aatcatcgga caacatcata ggctctgaga ttctttctaa cctggaaagt gggcgggttg 420  
aacatcatgt cacagc 436

<210> 8712  
<211> 416  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-A9

<400> 8712

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ggaaacataa ccatctttga ttaacgagct agtcaagtag aggcatacta gtgacactct 120  
gtttgtctat gtattcacac atgtattatg tttccggta atacaattct agcatgaata 180  
ataaacattt atcatgatat aaggaaataa ataataactt tattattgcc tctagggcac 240  
atttccttca gcgcgtagta atttgtttcg ataactaata gatttttgta ataagtatgt 300  
gagttcttta tgactaatgt tgagtccatg gattatacgc actctcacgc ttccaccttt 360  
gctagcctct ctagtaccgt gcaactttcg ccgggtacat aaacccaaca tttatc 416

<210> 8713  
<211> 157  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-B1

<400> 8713

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ttttgaggga tttttgcagt ggggtttgta ggggtctatg ccgcgctggg tttgggattt 120  
gaaataaaac gaagggagat gtgccacgct cttaagg 157

<210> 8714  
<211> 397  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-B10

<400> 8714

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agaccctcac cggcaagacc atcaccttgg aggtggagtc ctccggacacc atcgacaacg 120

tgaaggcaaa gatccaggac aaggagggca tccctccgga ccagcagcgc ctcatcttcg 180

ctggcaagca gcttgaggat ggccgcaccc tggctgacta caacatccag aaggagtcca 240

ccctccacct ggtgctcagg cttcgtggag gcatgcagat ttttgtcaag acgctcaccg 300

gcaagaccat caccctggag gtggagtcct cggacaccat cgacaatgtg aaggccaaga 360

tccaggataa ggagggcatt cccccggacc agcagcg 397

<210> 8715

<211> 230

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-B3

<400> 8715

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tccgggtttgt gcacatcttc cggtagagtt cagttcgctt cccgtgttaa aactagtgat 120

tgtcatggag attactgttt aactgagata ccgatgttgc catggtggat agaacaataa 180

tttatgcggc tgagaaataa tggcgttact ctgactgttt ttcacccact 230

<210> 8716

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-B7

<400> 8716

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gttttcagcc ttgttttggg caccgaggag cctggaatat cttacgtgct gtgctgctcg 120

gcgtttttgc acatcttccg gaagagttca gttcgcttcc cttgttaaca ctagtgattg 180

tcgtggagat gactgtttta ctgaaatacc gatgctgcga tgggtggatag aacaataatt 240

tatgcggatg agaaatattg gcgctactgt gactgtgtat caccactta tcttgtgatt 300

tcgcgagccta tttggcaatt ggaaaaaaaa aagcaagcaa atcaccgaac catccgaacg 360  
tcacgaacg 369

<210> 8717  
<211> 442  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-B8  
  
<400> 8717

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cccgggtgggc atattttcat cagggagtcc tgcttccacc agtctgggga ttccaagagg 120  
aaagtgaacc cgacgcacta ccgggagcca aggttttaca ccaagggtgtt taaggaatgc 180  
cactcctatg accaagatgg gaattccttt gagctttctc tggtaacttc caagtgcatt 240  
ggagcttatg tgaagagcaa gaagaaccag aaccagatat gttggctatg ggagaaggtc 300  
aagtgcacag aagacaaagg ctttcagaga ttcctggaca atgtgcagta caaatccact 360  
ggaatcctgc gttatgagcg cgtgtttggg gagggttatg tcagcaccgg tggattcgag 420  
aacacaaaag aatttgtgga ca 442

<210> 8718  
<211> 404  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-C1  
  
<400> 8718

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ctaatatgat gaacatccaa gatgggtata ataaaaacta tcatataaag tgcacgaat 120  
actatgagaa gtttgatact tgataattgt tttgagatat gaagatgggtg atatttgagt 180  
catgctagtt gagtagtttt gaatttgaga aatacttggt ctaaagtttc tgattcccg 240  
agcatgcaca tatggtgaac cgttatgtga tgaagtcgta gcatgattta tttattgatt 300  
gtcttcctta tgagtggcgg tcggggacga gcgatgggtct tttcctacca atctatcccc 360  
ctaggagcat gcgcgtagta cttcgtttcg ataactaata tatt 404

<210> 8719  
 <211> 302  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-052-Q1-E1-C11  
  
 <400> 8719  
  
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 gctgcggatt attgagcatc ttggaacctc aagagtggcg acctgaagaa gggtcagact 180  
 tgcccttgcc tatggcagtt taatgttgct attatctgtc ttctgttgga tgtgttatga 240  
 gtatgttggt ggttaccaag gttctatatc taaaanaaaa aaaaaataa aaataaataa 300  
 aa 302

<210> 8720  
 <211> 210  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-C2  
  
 <400> 8720  
  
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 cgctacctct gcatttacct acaggattag ttttaaacct caataattgt tatttagtgc 120  
 tagctttgag catgaacatt gtatctggat ctcgtttaat tcgagatggc tactcattta 180  
 aatccgagaa ataagggttg ttcaattata 210

<210> 8721  
 <211> 381  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-C3  
  
 <400> 8721  
  
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 ttgaagttct catgataaac tcccaaagcg gaccaggttt attattcccc aaggaggat 120

gggagaacga tgaaacggtt gaacaagcag ctgctcgaga agctatagaa gaagctggag 180  
 ttcaaggaga tatagtgcaa tttctagggtt tctacgattt caagagcaag acgcatcagg 240  
 acgctgtgctg ccccgagggc atgtgcagag cggcagtgtt tgcgctgcac gtgaaggagg 300  
 agctggcctc atggcccag cagagcacc gccggaggac ctggctgacg gtccccgaag 360  
 ccacgtcaca atgtcgggtac c 381

<210> 8722  
 <211> 429  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C4

<400> 8722

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 acgccttctt caccgccgtc gtgcctcca ccgccaacac ggacctcccc cgcttcatcc 180  
 tcggcgagtc catgggcggc gccgtggcgc tgtcctcca ccggatgcgc ccggcgtact 240  
 ggaccggcgc cgtcctcgtc gccccatgt gcaagatcgc tgatgagatg cggccgcac 300  
 cggtggtggt gagcgtcctc aagctgatga ccaacatcat cccacgtgg aagatcgtgc 360  
 cgaccaccga cgtcatcgac gccgcctaca ggatgcaaga gaagcgcgac gagattatgg 420  
 aacaacccc 429

<210> 8723  
 <211> 401  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C7

<400> 8723

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ataaaaagaa aaaaaaaat 180  
 aaaaagaata aaaaggaaaa aaaaagaaa aaagcggggt ttctaaaagt ttaaaaactt 240

catcatatga tgacgggagt ttaaaatttt gaaagtttg accaataatt tttttgaagg 300  
 gtcgtttttt aaaaaccggt aataggggaa aaacctgtgg gttccccaat aaacccgctt 360  
 gttggaaaat taacttttat caaaagggtt ataattgaaa a 401

<210> 8724  
 <211> 278  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-C9

<400> 8724

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 taaaaactat cctagaaagt gaattggatg ctatgatcaa tttgatgctt gataattggt 180  
 ttgagatatg gaggtagtaa tattaaagtc atgctaattg ggtgattatg aacttaaaga 240  
 atgcctgtgt tgaaatttgt gaatcccgta acatgcac 278

<210> 8725  
 <211> 386  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-D1

<400> 8725

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 caaaatgcac tgctataatg gccgtttctc aggcctgttg ttgttggcga aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaacaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aagaaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg ggccccccaa 240  
 aaggatcaaa cctaactaac ccgtgaatga aacttaaaac ccctccaaaa gggccaccaa 300  
 aattaaatta aagggcgtcc ttttaaaaaa ttcgtaacgg gaaaaacccg gggtttacca 360  
 aattaaaccc ctttgaagaa aatccc 386

<210> 8726  
 <211> 416

<212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-D2  
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 ccgggcccgt gtccaggtcg aacatggccc gtaggtcggg gcgtgttttt ttaaaataat 120  
 tacgcgtaga agaaaaataa aaagaaatac taaacggact ccaaaaattc cgaaataaat 180  
 tttcacgggc ttctaaaatc aagccgcaca aggtgaacat ttatttggca cctaaatgca 240  
 attttgaaaa acacacattt ttctaaatt caaataaaac accaaaaaaa ctccgaaaca 300  
 aaatcttatt tgattttatt attaaatcct caatatttct ttattttggg aaagtcattt 360  
 tattccact ctcatatttt tgcaatagaa ataattgatg ataaaataaa taaat 416

<210> 8727  
 <211> 423  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-D4  
 <400> 8727  
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 tgtgatcggt agctattttg agtgggttca gaacattcaa ggattcatgt gggaagaaga 120  
 aaaggtgaac atggagctcc ataagtacat gaacagcgcg ttccagaaca tcaaggccat 180  
 gtgcaagtct caagattgca accttaggat gggagcattc accttgggag tgaaccgggt 240  
 tgctcgcgcc accatcttga ggggctggga ggcatgagga attccagatt ccttatcgaa 300  
 taatccatgc ccgacaccgt ggtggatgac agttcttata tccaccatca ttgatttggg 360  
 aaattcatca taagttgccg gcatgccagg agtccaattg agataatttt cggtgtacat 420  
 gac 423

<210> 8728  
 <211> 437  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-E1

<400> 8728

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cattgtgaaa atactttctac gagaggggtt tattgaaagt gttcggaac atcaggaacg 120  
taacagatat ttcttggttt caactttgcg acatcaaaag agaaagacta gaaaaggaat 180  
atatagaaca agaacctttt taaagcgtat cagccgaccc ggcttacgaa tttataccaa 240  
ctatcaagga attcctaaag ttttgggtgg aatgggaatt gctattcttt ctacttctcg 300  
aggaataatg acagatcgag aagctcgact aaacagaatt gggggagaag tcttatgtta 360  
tatatggtaa tcgccccgcc tatagtgtc gaattctatc tcgccccttc tatttttaaa 420  
ataaaaatag aaaaata 437

<210> 8729

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-E12

<400> 8729

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ggacctaaaa ggtataattc tcaacaaaa actgcacaga cattagatgc tctgtttcta 120  
gtagcaagtt tcagttgagc gtaagcatac caattactgc tgtatttgtc tacttgetgg 180  
gaccatcttg ttaccataga tgttttaact caaggcagat catgcagggg tatttatgta 240  
tttttatttt ctttagaggt ttaccaccat gcatacatga tgactggcat catgaactct 300  
atgagccaaa ctgcttaatt gcaaccaatc cttgggcact tagccaaagg attgtggtcc 360  
aatctatcgg tggtttaatc ctagctacac tatcagaaaa atttccctac ttctataaca 420  
aaa 423

<210> 8730

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-E4

<400> 8730



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 tgtcgtgcaa atgcatctga tgccatcttg tgcactgtgc ttggacaaaa tgctgtccat 120  
 ggagcatttg ccgggttcag cggcatcaca tcaggtatth gcaacacaca ttatgccttc 180  
 ctcccgatca cagaagtcac cacaacaccg aagcatgtga acccaaatag caggatgtgg 240  
 caccgatgtc tcacgtccac tggccaaccg gacttccact gactcgcgtt gagcgtttac 300  
 ttctctgcac aggctaaact cgtaatgaat taacatattt ttgcttacc acagactagt 360  
 cacagctgaa agattagtca cgggtgcaagc taccaacatg ttaacaataa tgtaatactg 420  
 agaatgaact cgatcgactt gtttc 445

<210> 8731  
 <211> 399  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-E9  
 <400> 8731

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 gaaaaaaagg ctaggtggcg aatggtaaaa ccaatgttgg gcattgctgg aagagcttta 120  
 ctttaaggcga actgtcaagg ggttcccatt atagcccaac cgcgtaagca acgcaaaatc 180  
 cgggaacata acaccgatat gacggaaact agggcggcaa gagtggaca aaacaccagg 240  
 cataaggccg agccttccac cctttaccaa ttatatagat gcattaatta aataagatat 300  
 atagtgatat cccaacaagt aaacatgttc caacaaggaa caacatctcc atgttccaac 360  
 aaggaaacaaa cttcaatctt cacctacaac taacaacgc 399

<210> 8732  
 <211> 319  
 <212> DNA  
 <213> Triticum aestivum  
 <223> Clone ID: LIB104-052-Q1-E1-F1  
 <400> 8732

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 gccatccgcy tgattggaat ttcgatttgt aggttttcaa tactactata tatgctacaa 120

ataacatttg taggctttca ataatatattg tcttgcaacg gggaaaaatc acttacaatg 180  
gacaaaagag tcaggggtac cagatctttc aaagtgtgag atgcggtgac gcacagaaga 240  
agctcgctc aattcgacg taatcccact tcactacgct gtcaaaatgg cccctccata 300  
caagtaaaaa cccgtcggt 319

<210> 8733  
<211> 396  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F10

<400> 8733

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gggggggcca gaagacgaag aatccccagg agatgatcac gacgggtgatg ctgtacacag 120  
tcatcatgta gaagatgcag gacatgatga tgatgctggc ggagcagacg acgctggacc 180  
atcgatgggc tgggtgcagg accctcatat tcaatagctg cttctcaagc agacggataa 240  
cgcaagagct gccgcccag agaaagccaa gatggatcaa cttgagttag acgcccgttac 300  
tccattgtat gaaggatgca ggcccaggga taccgcctg aaagtaacgc tcatggctct 360  
ggagatgaag gtaaaacaca aaatgaccga cgcgtg 396

<210> 8734  
<211> 400  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F11

<400> 8734

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gacaaagttg ggagaagggg gttggccgtc gtcttgcggt tgggcccagg cagcgggtgg 180  
ctggacgccg cttctgctg tcttcgagcg atgggagagg gttagggtct gtcgtttgcc 240  
gttcgattgg tgactgttgc gggttggcag cgcgccgtgt agctgcgaga caacttcctt 300  
gttgatctgc cgtcctgctg cagtgttata tactgtcgaa ttccaaaaac gaggtctgcc 360

acacgcgcat atcctcatct ggcgtaaagg agacaaagat

400

<210> 8735

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F12

<400> 8735

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catcactgta gagtaacttg tgttgggtga tatacacaca tgttgtcaaa accaatttta 120

cccccaaacc gctgcttggt cagtactgaa aaaaaaattc aaagggtggga aaatggcata 180

gtgttttatt tttaacaatt ttcttctctt aaaatccaac acttggagtt cgaacacaat 240

ctaagtaccg agaacctttt catatctcct cataagtaca acaaaacatc gatgacttaa 300

tttccaaata ttacaaagta aatacccgta acttgaaatg aacatgaaac actgtcatag 360

atcgctcgac gggcccagac catcagcatc cctaataaac tggataagaa taaccaaaa 418

<210> 8736

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F2

<400> 8736

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caactccata tttggtccag aatcaagatc aagatgatgc actcacatag agtaaccact 120

tgagctcaaa ttcggcaagg cagcatgttt tggacatata aagatgctgt aaaaatttcg 180

taccaaattg acttggcaaa atggaacttg cttcacaac atcctctttg tccagaaact 240

tgcaataatt tttggggaga aaatggcttg attaaatgtt cccaaatttg gtggagagat 300

gggatattgg taggagcatg atctagtaat ttttcaaaaa taatgaagca atataaataa 360

cacttgcttc acaacctgaa aatattaaca gaatataaga tatgaaactg tgctcacata 420

gatga 425

<210> 8737  
 <211> 447  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F3

<400> 8737

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aggaatggac aagtatcaca gcaacacccg ctttgcaccc ctgagagacg ctccatttgc 180
tctccgtggt gccttttgta cctccaactc gtctttcaac aacatggatg gccttagaca 240
ctcctcaagc attgggcaag caaggagcta cacatcttct cccttaggag ctctgcgaca 300
gaagattcct ccatctggaa accgatccct acatacaagt cgtcccttgc ctgctcctgt 360
tgcgaaaccg ccaactgtct cccatcttcc tctgaagaag ccacagctga gcgctacgtt 420
ctccatctca caccgtatat ttggcgt 447
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<210> 8738  
 <211> 431  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-F4

<400> 8738

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tataattatg ataaattaca ggaacatgct tttgcgttga ttctttttga tactgatcaa 180
taaacaaatt ttcaggactt actagtttgg tagaattttt agagttccag aagtttgctg 240
tagttacaga ttgctacaga ctgttctatt tttgacagat tctgtttttc gtgtgttgtt 300
tgcttatttt gatgaatcta tggctagtaa attagtttat aaaccataga gaagttggaa 360
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tcctttgttt t 431
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<210> 8739  
 <211> 418

<212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-F6  
  
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 ggagctactt cggcctgggtg cggcggtgtg tggatgcgtg tccctggggtt gaagtcacat 180  
 agcactccgc ctgcattgaa ggtgcccac cggcccttgc ccgtgctaaa gtgcactggg 240  
 gcaggatgga cgctgagaag cttgtgacgg acgcgccacc accgggcaag gagtatcgca 300  
 gcccgagatg tattataagg gtgtcctgaa gggcgccgc attattgcgg gtgagtgtc 360  
 caaggatgta atatttgagt agactcgcat tttgttatcc tgtgcgctga aaactttg 418

<210> 8740  
 <211> 434  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB104-052-Q1-E1-G1  
  
 <400> 8740

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 tttctatttt cgtttagttt cctgttttat ttaggttctg ctatcanatg aattttgttg 180  
 accatgtaaa tttgcaaata acccagcac tatattttgg ggctgcacaa aatgcttccg 240  
 ggcaattgga gttaatatata attatgattg tatttgaaag ggcaaaaaaa ggtgtcgttg 300  
 gtccattgtt taaaatccat ggggtgtttt aaacatctcc aaaaatattt cttaatgaat 360  
 gagaattatg tagtgaatat ttccaaccta aggaacattt ttaatttaca gtttttataa 420  
 attctaattt gact 434

<210> 8741  
 <211> 409  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-G10

<400> 8741

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gtctatgcat ggcgtgagtt agctgggttaa gttgttagct acgtgcatgc atcgcatgga 180  
tatgggtgca tgtgggttag atattctagg aggtgagtggt ccgtgtgtgt gcatggatag 240  
agtttggttag actccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaca aaaaaaaaaa aaaaaaaaaa aaacaaaagg aaaaaaaata 360  
caacaaagga aaaaaaaagg caagaacaaa aaaaaaaaaa ggggccgcc 409

<210> 8742

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-G2

<400> 8742

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gctgcaaata gaatgaccgg ccatgaatta taaggctgag cgatgtgcgg ttgtctcttc 120  
cgtttcttag tttcgaatca gcaacgcgcg tttgctgac cgtaagctgc accggagttt 180  
gtatccacgc gttttttatt tcttcataga aacgtttgta tccacgcgca ggcggtgacc 240  
cacacggatt ttctccaat gctccagact acacggaatg ggccaccaac tttcagaaat 300  
gcatattggg ccaggcctaa tgaagcgaac caacaggctt tatttgggcc ggttcagcgt 360  
cttgaaagtt ttcaagtcct caaagaaagt tcttcatcga ttaaaaaaaa gatcttcaag 420  
ggccaaccta tattaat 437

<210> 8743

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-G3

<400> 8743

gtgacgggtcc tacattcacg ggtccacggg cccagtagaa gaattgttaa aattcactag 60  
agcatgataa aattctgatt tttttacaca agattgatat acaaatttcc cagtttgtac 120  
taatttttca caatttttgg agttatagaa gtatatgaaa tttccagatt actacaaact 180  
gttctgtttt tgaaaaattc tgttttcctt gtgttggttg cttattttga tgaatctatg 240  
ggtagtatcg gggggtatga accatgaaga agttggaata tagcatatat aacatcaata 300  
taaatttata atgagttcac aacagtacct aaagtggatga tttgttttat tataactaatg 360  
gagcttatga gttttctatt gagttttgtg ttgtgaagtt ttgaagtttt gggtaaagtt 420  
ttgatggagc acgaaataag gagtggcaag agcctaagct tggggg 465

<210> 8744  
<211> 430  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-052-Q1-E1-G5  
<400> 8744

atgcccggtt cgacgggtta tgaggatcgc attgtgaact tgtcatcagt tgcccacctc 60  
catacatatc caaaggggat tctgtttgat cagctcaatg acaagaaaat atacaatgat 120  
aaaatggcct atggacaatc taagcttgca aacatactgc acgcgaaaga gctctccagg 180  
cggctcaagg aggaaggagc taacatcaca gtttaattgcg ttcacacctg attgatcatg 240  
accaatttga tgaggcattc ctttgctctc atgaaggcaa ttcaagttgt cacctacttg 300  
ttctggaaga atgtaccca gggagcggca actacttgct acgtagggtt caaccctcag 360  
ctgaagggtg tgacaggcaa atactttgcc gactgcaacg aggagaagac gagcaagcat 420  
gcgaagagcg 430

<210> 8745  
<211> 444  
<212> DNA  
<213> Triticum aestivum  
<223> Clone ID: LIB104-052-Q1-E1-G6  
<400> 8745

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gataattatg attccgatga tttgattgaa atatcccttg atgaacatga tgcttgctat 120  
tcttatggcc atgataccaa tatttatgga gatgaatttg ctatagtttc tgatgttaaa 180  
catgagattg ttgccattgc acccatactt gatagttcct tgaatcgaaa gcatgattgc 240  
gatgaagtta ttataaatta tattaatgtc aattgtgtta atgatatgca aaaccctaag 300  
cttggggatg ctagttttgc tatctctact atttgttgca atgatcatga ttgggatgat 360  
tcttcttatg atcttgaaaa tttatttaag ccccatgatg aacatgagat tgataataat 420  
gtttgtaata atatttaaaa tggg 444

<210> 8746  
<211> 438  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-G8

<400> 8746

gggtcgacgg ggatggctat gattaccaac ttgtaacgcc cacgacgagg ctatatctcc 60  
cacgtgtcga ggcacgactt agaggcataa ccgcatagtg gttttgtcgc aagaaggggc 120  
atcttcacac aatcccatgt aatgaacaag aatgggataa agagttggct tacaatcgcc 180  
acttcacaca atacatgaat ataattcata catcatccga aatacaaaca tatagaccga 240  
ctacgggtcaa aatccagatg aaaataagac aaccccaaat gcttgatccc cgattgtccc 300  
aactgggctc cactactgat catcaggaaa agacacatag taacgaccac gttcctcgtc 360  
gaacgccac ttgagatcga ccccatcgtc ggcaccggca tcgtcggcac ctgcaactgt 420  
tttggtagaa tctgtgag 438

<210> 8747  
<211> 411  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-H1

<400> 8747

cacggcactt caatataaaa aaaaaaaaaa aaaaaaaaaa aacataaaaa aaaaaatatt 60  
aaaagcaaac aagtatgaaa aaaatacaaa aagtcccaac cactaaaaag ataaaaaagt 120



caaaaaaaaa accggccgcc caaaagggttc aacactaatt tacccttaaa tgcaacgtaa 180  
 aaccctcca aaagtgccac caaatttcat ttaacgggcc ttctttttaa aaatccttaa 240  
 tgggaaaaaac cctggcttaa ccaacttaaa tccccttgaa gaaaatcccc ttttcacaaa 300  
 cgggggtaat atcaaaaagg cccgcaccta tcccccttcc aaaaatttgc ccaccctgaa 360  
 tggcaaattgg aacccccct taagcggccc ataaaccccg gggggtttgg t 411

<210> 8748  
 <211> 407  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-H10

<400> 8748

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 agaagatctt cctcaatctc agcaagccct acgtcacttt caagtccgat cccaagaacc 120  
 cggccatcat cgcttgagc gacaccgctg cgacgctagg gaaagacggg aagcccggtg 180  
 gcacgggtggg gagcaccact tgcgccatcg agtccgacta ctctgtggcg tacggcggtg 240  
 tgttcaagaa cgacgcgcca ctggccaagc cggggggccaa gggcgggcag gcggtggcgc 300  
 tgcgtacgtt cggcaccaag caggccttct acaactgcac catcgacggc gggcaggaca 360  
 cgctgtacga ccacaagggt ttgcactact tcaaggactg cgtgatt 407

<210> 8749  
 <211> 414  
 <212> DNA  
 <213> Triticum aestivum

<223> Clone ID: LIB104-052-Q1-E1-H11

<400> 8749

ccgggtcgac gggacctcca tggcggccac cccttgctcc tatataagta gatccgtcta 60  
 gtagcttttc cttgggtttt gttgagttaa aagttagcca gtgcaacttc gtgtacttcg 120  
 tttgtgtcca acgaccagac caagaccgct tacggatccc caccattata aatacttcat 180  
 atatattcgc aatatgcaga ttgctttatc atattcttgc tcgttcttcg attgcttgca 240  
 ggaatagacc ttcgtggtca ggttgatcat gctccagcgt ggtcaataac ctctcggagt 300

tggttttagcg attgctaagg cgcaacatcg tgcacgtttg tagtcggatc gtcaaagtcg 360  
tctccaccaa attgatagtt atcatctcat cgaaagattg ggacaacccc gcct 414

<210> 8750  
<211> 386  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-H12  
  
<400> 8750

gggccgacgg gccggcatcc cctaacaagg agataaacca acaaactgtg gtgcctcagc 60  
gaaagcaagc gaggtttgtg ctaccaaaga ggcgccaggt ggacgccgag gcgcggagcg 120  
agctgcagga cctgatggac gcaagggagg ctggcatgtc cttcattctg ggtcactccc 180  
acatgaaggc caagagcggg tctagcttcg tgaagcggat cgtgataaac ttctttctacg 240  
agttcttgag gaggaacagc cgtggcccggt cctatgccgc taacataccc catgcttcca 300  
ccttggaggt aggaatggtc taccaagtct gatagtagca gctgtgtgaa agttttaagt 360  
tagagagatc agatgaagtg ttgttt 386

<210> 8751  
<211> 407  
<212> DNA  
<213> Triticum aestivum  
  
<223> Clone ID: LIB104-052-Q1-E1-H2  
  
<400> 8751

ccgggtctac gatcaggact acaagacata cgtctcgggt attgttcggg gagataaggc 60  
aaaatatatt taccaaaaagt acttttgttc acttacagct tagtggaggg ctgacccccct 120  
tgcgggcact ggcgggcaag gacgccctcc gaggcagggc ctccctggcga gggtttcttc 180  
tctcgtttgg aaacctttgt ttccaagtct tcaggggtgg tccttttctt tccttcggaa 240  
gaggggaattt cggattcttc tcctcgattt tcctccttcg tggagataact aattctctg 300  
gtttggatga gtaatacgtg aggctcgctt ttggcttctt catctctcct tttatcttcc 360  
cccgagggca cttgataagg tatgtactcc agcatcctgg ctagtat 407

<210> 8752

<211> 371  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-H3  
  
 <400> 8752  
  
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 ggcgagggcc acaaggacga cgacggccac ggcagcagca gcagcgacag cgacagcgac 120  
 tgagccagct ccggccgcgc tccggcagca gcgtgcagtg taggcgagat cgatgaacgc 180  
 ttgggagaag tgtggcatatc atatgtgtg cacggtttgg agcgtgtggt agcatatgta 240  
 tgtaatgcgt gacatgtctc atggatcttg tgatgtataa taattagccg gctgcaactgc 300  
 actgcacggt gcttgtaata ataacgttaa tgaatcatgt tggattgat gcaaaaaaaaa 360  
 aaaaaaacac a 371

<210> 8753  
 <211> 406  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-H4  
  
 <400> 8753  
  
 atgaacatct tcaccaaagg aggtctctct gctaggcccg ttctctgatg gagtcgcttg 60  
 cctcgcaagc gaagccggct gccgtgctct ggctcgcccg ctctctccag gccgcgcgtc 120  
 tccaccgct cgtctccttc tgcgtcagct ccagggtctc gtcgatcaga atcgctcagt 180  
 gcttctgct caacgggttc atcttctctg ggagcttgct aaccttgaaa tcggtgggtca 240  
 ttccaactct tctatggata ctgcccgagc aatgcgatca atcatgggga caacatctat 300  
 gtgatcacac aacagctgtt gccttgattt cgttcttacg ttcggggctt gtcgagattt 360  
 tctatgtatt ttggttttat cccctctaca tcttcagctt tataat 406

<210> 8754  
 <211> 405  
 <212> DNA  
 <213> Triticum aestivum  
  
 <223> Clone ID: LIB104-052-Q1-E1-H6

<400> 8754

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gcgttgagcc gccggggcta tattgagtca cgggtctgcc tgagccatct ctgttgcggt 120  
gaacggatca tcgatcatcc gaacaaatca ggtgatatcc atctaagttt gttttattag 180  
cacatattgc tttttgtcaa aaaacagttt atctttgcct tgggtctgcaa tattgttgat 240  
gcaggacaat tgttcactac atcaacacga cgtggctaac ttacccatcc gcctgggetta 300  
ccgtgtctgt gattgacttg cctgtctgca ctggcttaca acaccgtggc tgactcatct 360  
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<210> 8755

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A1

<400> 8755

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ggtagagattt tacagttttt cgtagtttat atcgggtcag ttcgtcatat cgatagtcca 120  
cgaatcttcc agacaaaaaa ttagggtcag ttcattctta cggaaccaat ctaagccggt 180  
gcataatctt tttaggggtt tgcatgtgg aatttgcggt tgcattcgctg tttctaactg 240  
ctgggcgtac agtctagtcc tttacacttt cgagttctgg tcataagttg tcaagtcgct 300  
gccgcacat catcatcaat cctgtcatct 330

<210> 8756

<211> 248

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A10

<400> 8756

ttccctgggt tttgttgagt taacagttta ccagtgaac ttcctgtact tcgggtgtgt 60  
cgaacgacca caccaagacc gcttagggat cccaacatt ataaatactt caataatatt 120  
cgcaataagc agattgcgtt atcatattct tgctcgttct tcgattgctt gcaggaaaaa 180

accttcgtgg tcaggttgat catgccccac cctgggtcaat accctctcgg acttggttta 240  
gcgacttt 248

<210> 8757  
<211> 362  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A12

<400> 8757

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cgccaagcag aacgcccggc cggtgcaagc gctcaccggc agggtcctca acttctaaaa 180  
cccgcccaac agcatcatat ccttcgacat gtgatcttac cccattaga tgggggtccgc 240  
aataacctag aaattaaccg tgggtactgta atcgtgtatc accatcagcg tactgaccag 300  
ctaattctcgt ttttgccctg tcattatctc ttcgctgctt tactcagatg aaacattgtg 360  
ac 362

<210> 8758  
<211> 347  
<212> DNA  
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A2

<400> 8758

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ggaaatctgt cttgagggca aatacttcgg gtcagggaaa cttgacatta tcagacgcag 180  
aagtcacagg ccagaaaatc agtaacggga tatgataatc atcgctctaa ctgaaatcac 240  
tatcttctgt gggaatggcc aatccgaatg ttctgaagca ttccttgaag cagtcgctaa 300  
gtccgtcgag ttccagcagt ccagatgcgg acatcctctt ggcttaa 347

<210> 8759  
<211> 368  
<212> DNA



<400> 8761

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tggtacctca tagcttgctt ccatgactga agggaaattc ccattctcgg ccatctttct 120

tgagggggctt ccgacgatgg aagtgtcacc ctgctcata ggtggtcgcc ttgttcttga 180

agatgtcaat gtatgcgaac tcatgggaag taggcgaaga tgcgtacgt ccgaaggcga 240

agatgccttg ataacacttg gcaaagatgt cgaagtgggt ggtgtagccg taactacgtc 300

ttggtgggtgc tcgtctcgcg gtcttctctt tttctcatga agcttcgcct tggcgtgtag 360

taaggctttt tgggacttgt gcatttcggt ttgtggagca tcttcaagat gataatgtca 420

<210> 8762

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-A9

<400> 8762

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agacttggtc aaaacattgc tgaagaaaaa ctgtgtattg ctcacacctc acaaacagga 120

atactagtcg agctgcttgg tcccaactgt cgcccgcttc ttgtgcaatt ctgcggttta 180

ttgacgacat aggttgacaa tgggtgtggga ccgtgatgtc aggaaccag gaggaagcaa 240

aaaaattatt gttttatata ctaataagga ggcacttgcg tacgtgcggc tatggccctg 300

gtgggtcccc actgtcatcc tctccaagta aagtcatctc ctcacctca tgttcgttga 360

ccatgttgat aacgcgagac ggctatgccg cgacgaacgc aacaactcca aaga 414

<210> 8763

<211> 382

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B1

<400> 8763

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gacaatagtt tccccaattt cagacataac ggcagaaagt gcgaggagca ggaagaaaga 120